Multi-Protocol On-board Ethernet Multi-function Print Server
and Wireless (IEEE 802.11b/g) Ethernet Multi-function Print Server

# NETWORK USER'S GUIDE

## DCP-340CW
## MFC-640CW
## MFC-820CW

Please read this manual thoroughly before using this machine on your network. You can print or view this manual from the CD-ROM at any time, please keep the CD-ROM in a convenient place for quick and easy reference at all times.

The Brother Solutions Center (http://solutions.brother.com) is your one stop resource for all your printing needs. Download the latest drivers and utilities for your machine, read FAQs and troubleshooting tips or learn about special printing solutions.

Version A

# Definitions of warnings, cautions, and notes

We use the following icon throughout this User's Guide:



Notes tell you how you should respond to a situation that may arise or give tips about how the operation works with other features.



Improper Setup icons alert you to devices and operations that are not compatible with the printer.

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## I Index

# 1 Introduction

## Overview



The Brother machine can be shared on a 10/100 Mb wired or IEEE 802.11b/802.11g wireless Ethernet network using the internal network print server. The print server supports various functions and methods of connection depending on the operating system you are running on a network supporting TCP/IP. These functions include printing, scanning, PC-FAX send, PC-FAX receive, PhotoCapture™ Center, Remote Setup and Status Monitor. The following chart shows what network features and connections are supported by each operating system.

| Operating Systems | 10/100 BASE-TX Wired Ethernet (TCP/IP) | IEEE 802.11b/g Wireless Ethernet (TCP/IP) | Printing | Scanning | PC-Fax Send | PC-FAX Receive | Photo Capture Center™ | Remote Setup | Status Monitor |
|---|---|---|---|---|---|---|---|---|---|
| Windows® 98/98SE/Me/ 2000/XP | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Mac OS® X 10.2.4 or greater | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | ✔ |
| Mac OS® 9.1-9.2 | ✔ | | ✔ | | ✔ | | | | |

To use the Brother machine through a network, you need to configure the print server, and set up the computers you use.

For Wireless Users:

To achieve optimum results with normal every day document printing, place the Brother machine as close to the network access point (router) as possible with minimal obstructions. Large objects and walls between the two devices as well as interference from other electronic devices can affect the data transfer speed of your documents.

Due to these factors, wireless may not be the best method of connection for all types of documents and applications. If you are printing large files, such as photos on glossy paper or multi-page documents with mixed text and large graphics, you may want to consider choosing wired Ethernet for a faster data transfer, or USB for the fastest throughput speed.

# Network function features

The Brother DCP-340CW, MFC-640CW and MFC-820CW have the following basic network functions.



## Network printing

The print server provides printing services for Windows® 98/98SE/Me/2000/XP supporting the TCP/IP protocols and Macintosh® supporting TCP/IP (Mac OS® 9.1-9.2 / Mac OS® X 10.2.4 or greater for a wired network and Mac OS® X 10.2.4 or greater for wireless network).

## Network scanning

You can scan documents over the network to your computer (See Chapter 4 for Windows® and Chapter 11 for Macintosh® of the Software User's Guide on the CD-ROM).

## Network PC-FAX (not available for DCP-340CW)

You can directly send a PC file as a PC-FAX on your network (See Chapter 6 for Windows® and Chapter 8 for Macintosh® of the Software User's Guide on the CD-ROM for complete description). Windows® users can also PC-FAX receive (See Chapter 6 of the Software User's Guide).

## Network PhotoCapture Center™

You can view, retrieve and save data from a media card inserted into the Brother machine. For Windows®, double click the Network PhotoCapture Center™ icon on the desktop of your PC. The software is automatically installed when you select network connection during the software installation. For Macintosh®, launch any web browser in which FTP is available and enter FTP://xxx.xxx.xxx.xxx (where xxx.xxx.xxx.xxx is the IP address of your Brother machine).

## Management utilities

### BRAdmin Professional (for Windows®)

The BRAdmin Professional utility provides powerful, easy to use configuration and management of fax and network settings.



### BRAdmin Light (for Mac OS® X 10.2.4 or greater)

BRAdmin Light is a utility for viewing machine status and configuring network settings from a computer running Mac OS® X 10.2.4 or greater. This utility is available as a download from http://solutions.brother.com.

### Remote Setup for Windows® / Remote Setup for Macintosh®

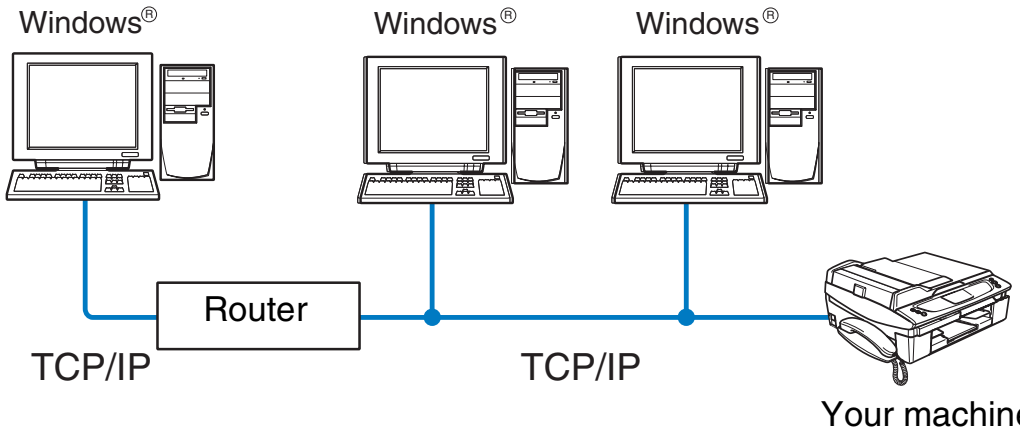
The Remote Setup software allows you to configure network settings from a Windows® or Macintosh®.

# Types of network connections

## Wired network connection example

### Peer-to-Peer printing using TCP/IP

In a Peer-to-Peer environment, each computer directly sends and receives data to and from the Brother machine.

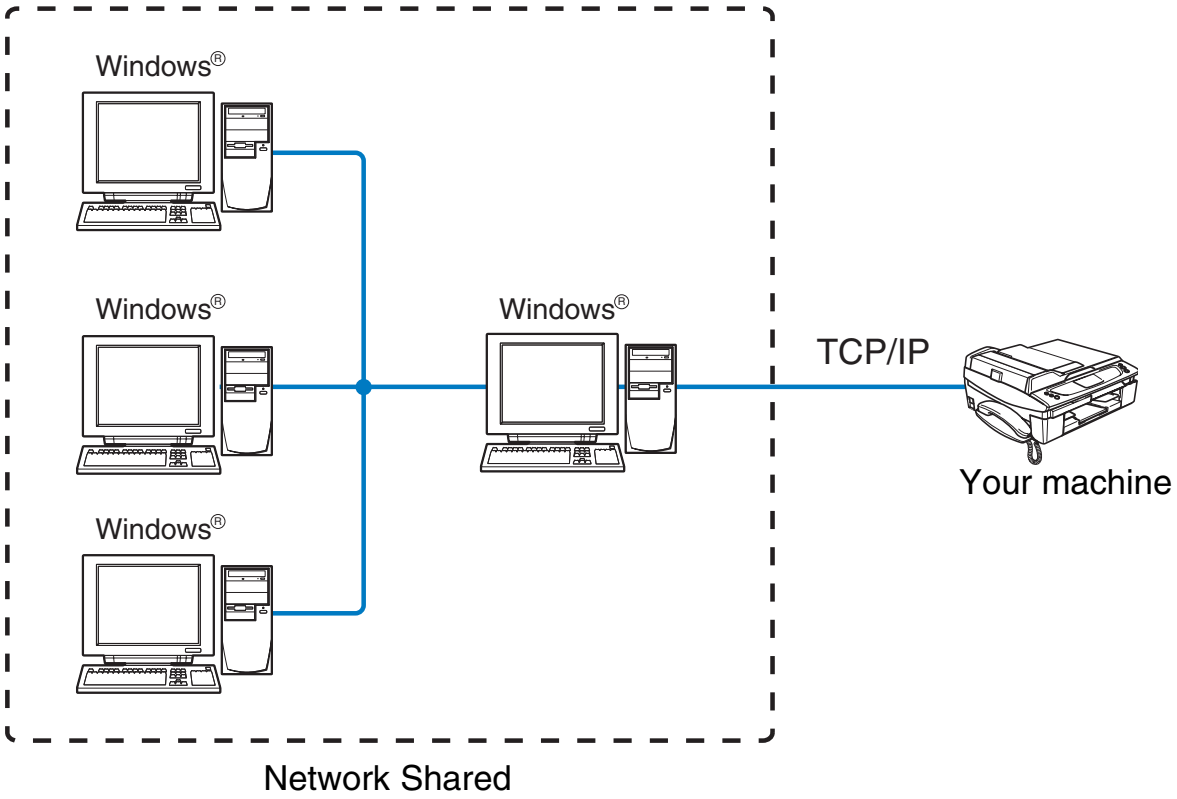


- In a smaller network of 2 or 3 computers, we recommend the Peer-to-Peer printing method as it is easier to configure than the Network Shared printing method described on the following page. See *Network Shared printing* on page 1-4.
- Each computer must use the TCP/IP Protocol.
- The Brother machine needs to have an appropriate IP address configuration.
- If you are using a router, the Gateway address must be configured on the computers and the Brother machine.
- The Brother machine can also communicate with Macintosh® (TCP/IP compatible operating systems) devices.



## Network Shared printing

In a Network Shared environment, each computer sends and receives data to and from the Brother machine via a centrally controlled computer. This type of computer is often called a “server” or a “print server”. Its job is to control the printing of all print jobs.




- In a larger network, we recommend a Network Shared printing environment.
- The “server” or the “print server” must use the TCP/IP print protocol.
- The Brother machine needs to have an appropriate IP address configuration.

- The Brother machine needs to have an appropriate IP address configuration unless the machine is shared via the parallel or USB interface at the server.
- The Brother machine can also communicate with Macintosh® (TCP/IP compatible operating systems) devices.

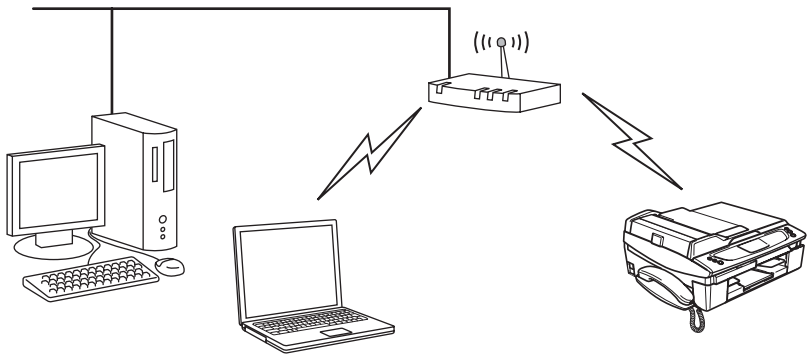


## Wireless network connection example

### Connected to wireless capable computer with an access point in the network (Infrastructure mode)

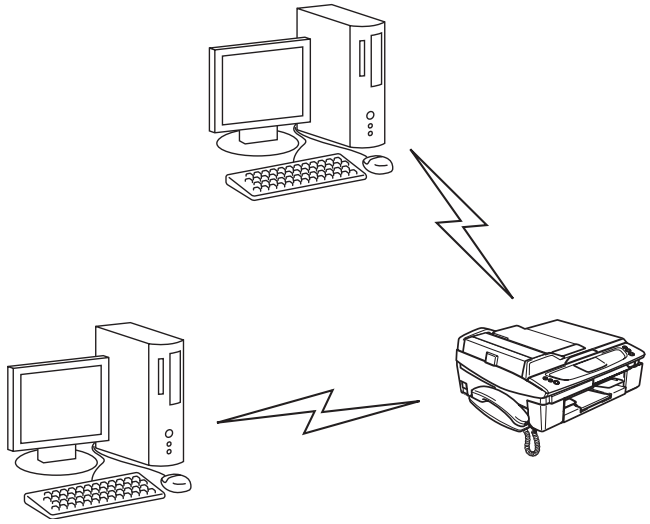
This type of network has a central access point at the heart of the network. The access point can also act as a bridge or a gateway to a wired network. When the Brother wireless machine (your machine) is part of this network, it receives all print jobs via an access point.

Wired computer connected to the access point



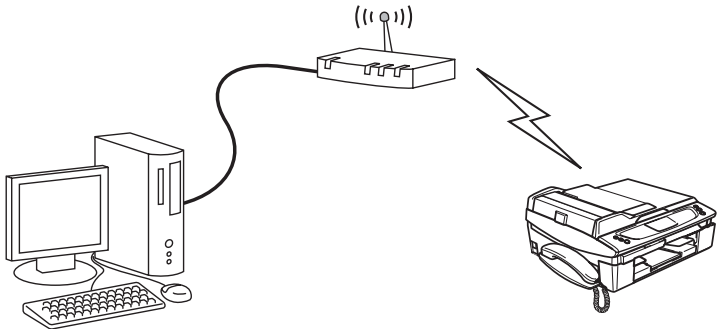
### Connected to wireless capable computer without an access point in the network (Ad-hoc mode)

This type of network does not have a central access point. Each wireless client communicates directly with each other. When the Brother wireless machine (your machine) is part of this network, it receives all print jobs directly from the computer sending the print data.



### An access point is in the network, but the computer is not wireless capable

This type of network has a central access point at the heart of the network. The access point is connected to a computer which is not wireless capable with the Ethenet cable. When the Brother wireless machine (your machine) is a part of this network, it receives all print jobs via an access point.



# Protocols

## TCP/IP protocols and functions



Protocols are the standardized sets of rules for transmitting data on a network. Protocols allow users to gain access to network connected resources.

The print server used on this Brother product supports the TCP/IP (Transmission Control Protocol/Internet Protocol) protocols.

TCP/IP is the most popular set of protocols used for communication such as Internet and E-mail. This protocol can be used in almost all operating systems such as Windows®, Macintosh® and Linux.

The following TCP/IP protocols are available on this Brother product.

### DHCP/BOOTP/RARP

By using the DHCP/BOOTP/RARP protocols, the IP address can be automatically configured.

**Note**

To use the DHCP/BOOTP/RARP protocols, please contact your network administrator.

### APIPA

If you do not assign an IP address manually (using the BRAdmin software) or automatically (using a DHCP/BOOTP/RARP server), the Automatic Private IP Addressing (APIPA) protocol will automatically assign an IP address from the range 169.254.1.0 to 169.254.254.255.

### DNS client

The Brother print server supports the Domain Name Service (DNS) client function. This function allows the print server to communicate with other devices by using its DNS name.

### LPR/LPD

Commonly used printing protocols on a TCP/IP network.

### Port9100

Another commonly used printing protocol on a TCP/IP network.

## mDNS

mDNS allows the Brother print server to automatically configure itself to work in a Mac OS® X Simple Network Configured system. (Mac OS® X 10.2.4 or greater).



## TELNET

The Brother print server supports TELNET server for command line configuration.

## SNMP

The Simple Network Management Protocol (SNMP) is used to manage network devices including computers, routers and Brother network ready machines.

# 2 Configuring your machine for a network with an Ethernet cable connection



## Overview

Before using your Brother machine in a network environment, you must configure the TCP/IP settings. In this chapter you will learn the basic steps required to print over the network using the TCP/IP protocol.

**Note**

You can configure the machine's TCP/IP settings using the control panel on the front of the machine. For further information, see *Control panel setup* on page 4-1.

We recommend that you use the automatic installer application in the CD-ROM we have provided with the machine. By using this application, you can easily connect your machine to your network and install the network software and printer driver which you need to complete the network configuration. You will be guided by the on-screen instructions until you are able to use your Brother machine on the network. Please follow the instructions in the supplied Quick Setup Guide.

If you want to configure your machine without using the automatic installer application, please read this chapter and learn how to configure the TCP/IP settings. Then, in *Chapter 5* (for Windows®) and *Chapter 6* (for Macintosh®), you will learn how to install the network software and the printer driver into the operating system running on your computer.

## IP addresses, subnet masks and gateways

To use the machine in a networked TCP/IP environment, you need to configure the IP address and subnet mask. The IP address you assign to the print server must be on the same logical network as your host computers. If it is not, you must properly configure the subnet mask and the gateway address.

### IP address

An IP address is a series of numbers that identifies each device connected to a network. An IP address consists of four numbers separated by dots. Each number is between 0 and 255.

Example: In a small network, you would normally change the final numbers.

192.168.1.1, 192.168.1.2, 192.168.1.3

### How the IP address is assigned to your print server:

If you have a DHCP/BOOTP/RARP server in your network (typically a UNIX®/Linux or Windows® 2000/XP network) the print server will automatically obtain its IP address from the DHCP server.

**Note**

On smaller networks, the DHCP server may be the router.

For more information on DHCP, BOOTP and RARP, see *Using DHCP to configure the IP address* on page A-1, *Using BOOTP to configure the IP address* on page A-1 and *Using RARP to configure the IP address* on page A-2.

If you do not have a DHCP/BOOTP/RARP server, the Automatic Private IP Addressing (APIPA) protocol will automatically assign an IP address from the range 169.254.1.0 to 169.254.254.255. For more information on APIPA, see *Using APIPA to configure the IP address* on page A-3.

If the APIPA protocol is disabled, the default IP address of a Brother print server is 192.0.0.192. However, you can easily change this IP address number to match with the IP address details of your network. For information on how to change the IP address, see *Setting the IP address and subnet mask* on page 2-3.

## Subnet mask

Subnet masks restrict network communication.

Example: PC1 can talk to PC2

PC1 IP Address: 192.168.1.2
Subnet Mask: 255.255.255.0

PC2 IP Address: 192.168.1.3
Subnet Mask: 255.255.255.0

**Note**

0 denotes that there is no limit to communication at this part of the address.

In the above example, we can communicate with anything that has an IP address that begins with 192.168.1.X

## Gateway (and router)

A gateway is a network point that acts as an entrance to another network and sends data transmitted via the network to an exact destination. The router knows where to direct data that arrives at the gateway. If a destination is located at an external network, the router transmits data to the external network. If your network communicates with other networks, you may need to configure the Gateway IP address. If you do not know the Gateway IP address then contact your Network Administrator.



# Setting the IP address and subnet mask

## Using the BRAdmin Professional utility to configure your machine for a network (for Windows® only)

### BRAdmin Professional utility

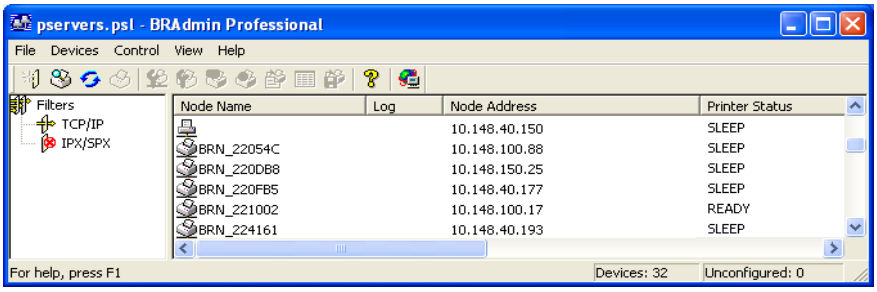
The BRAdmin Professional utility is designed to allow you to manage your network connected Brother machines in a TCP/IP environment.

### How to configure your machine using the BRAdmin Professional utility

**Note**

- Please use the BRAdmin Professional utility version that was supplied on the CD-ROM with your Brother product. You can also download the latest Brother BRAdmin Professional utility version from http://solutions.brother.com. This utility is only available for Windows® users.
- If you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows® XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.
- Node name: Node name appears in current BRAdmin Professional window. The default Node name is "BRN_xxxxxx" ("xxxxxx" is the last six digits of Ethernet address.).

1. Start the BRAdmin Professional utility (from Windows® 98/98SE/Me/2000/XP), by clicking **Start** / **Programs** / **Brother Administrator Utilities** / **Brother BRAdmin Professional Utilities** / **BRAdmin Professional**.
2. Select **TCP/IP** in the left frame of the main BRAdmin window.
3. Select **Search Active Devices** from the **Devices** menu. BRAdmin Professional will search for new devices automatically.






**Note**

- If the print server is set to its factory default settings without using a DHCP/BOOTP/RARP server, the device will appear as an APIPA device in the BRAdmin Professional utility screen.
- You can find the node name and Ethernet address (**Node Address** above) by printing out the Network Configuration List. See *Printing the Network Configuration List* on page 4-27 for information on how to print the Network Configuration List on your print server.

4 Double click the unconfigured device.

5 Enter the **IP address**, **Subnet Mask** and **Gateway** (if needed) of your print server.

6 Click **OK**.

7 With the correctly programmed IP address, you will see the Brother print server in the device list.

## Using the control panel to configure your machine for a network

You can configure your machine for a network using the control panel LAN menu. See *Control panel setup* on page 4-1.

## Using other methods to configure your machine for a network

You can configure your machine for a network using other methods. See *Other ways to set the IP address (for advanced users and administrators)* on page A-1.

# Changing the print server settings

## Using the BRAdmin Professional utility to change the print server settings (for Windows® only)



1. Start the BRAdmin Professional utility (from Windows® 98/98SE/Me/2000/XP), by clicking **Start** / **Programs** / **Brother Administrator Utilities** / **Brother BRAdmin Professional Utilities** / **BRAdmin Professional**.
2. Select **TCP/IP** in the left frame of the main BRAdmin window.
3. Select the print server which you want to configure, in the right frame of the main BRAdmin window.
4. Select **Configure Print Server** from the **Control** menu.
5. Enter a password if you have set it.

**Note**

By default, no password is required to change the print server settings. You can set a password to change the print server settings. Double click the device you want to set a password. Click **Control** tab, and then click **Change Password**. Enter the new password.

6. You can now change the print server settings.

## Using the control panel to change the print server settings

You can configure and change the print server settings using the control panel LAN menu. See *Control panel setup* on page 4-1.

## Using the Remote Setup to change the print server settings (for Windows® and Mac OS® X 10.2.4 or greater) (not available for DCP-340CW)

### Remote Setup for Windows®

The Remote Setup application allows you to configure network settings from a Windows® application. When you access this application, the settings on your machine will be downloaded automatically to your PC and displayed on your PC screen. If you change the settings, you can upload them directly to the machine.

1. Click the **Start** button, **All Programs**, **Brother**, **MFL-Pro Suite MFC-XXXX**, **Remote Setup**, then **MFC-XXXX LAN** (where XXXX is your model name).
2. Click **TCP/IP (Wired)** or **Setup Misc**.
3. You can now change the print server settings.

### Remote Setup for Macintosh®

The MFC Remote Setup application allows you to configure many MFC settings from a Macintosh® application. When you access this application, the settings on your machine will be downloaded automatically to your Macintosh® and displayed on your Macintosh® screen. If you change the settings, you can upload them directly to the machine.

1. Double click the **Macintosh HD** icon on your desktop, **Library**, **Printers**, **Brother**, then **Utilities**.
2. Double click the **Remote Setup** icon.
3. Click **TCP/IP (Wired)** or **Setup Misc**.
4. You can now change the print server settings.

# 3 Configuring your machine for a wireless network



## Overview

To connect your machine to your wireless network, you need to follow the steps in the Quick Setup Guide. We recommend that you use the Setup Wizard from the machine's control panel LAN menu and the installation application on the CD-ROM we have provided with the machine. By using this method, you can easily connect your machine to your wireless network and install the network software and printer driver. Please follow the instructions in the supplied Quick Setup Guide.

Please read this chapter for more details on how to configure the wireless network settings. For information on TCP/IP settings, see *IP addresses, subnet masks and gateways* on page 2-1. Then, in *Chapter 5* (for Windows®) and *Chapter 6* (for Macintosh®), you will learn how to install the network software and drivers into the operating system running on your computer.

## Wireless network terms and concepts

When you configure the wireless network machine, you must ensure that your wireless network machine is configured to match the settings of the existing wireless network. This section provides some of main terms and concepts of these settings, which may be helpful when you configure the wireless network machine.

### SSID (Service Set Identifier) and channels

You need to configure the SSID and a channel to specify the wireless network you want to connect to.

#### SSID

Each wireless network has its own unique network name and it is technically referred to as SSID or ESSID (Extended Service Set Identifier). The SSID is a 32-byte or less value and is assigned to the access point. The wireless network devices you want to associate to the wireless network should match the access point. The access point and wireless network devices regularly send wireless packets (referred to as a beacon) which has the SSID information. When your wireless network device receives a beacon, you can identify the wireless network that is close enough for the radio waves to reach your device.

#### Channels

Wireless networks use channels. Each wireless channel is on a different frequency. When configuring your Brother device to work in a wireless network, you must set it to the channel that is used on the wireless network that you are connecting to. There are up to 14 different channels that can be used when using a wireless network. However, in many countries the number of channels available are restricted. For further information, see *Print server specifications* on page B-1.

## Authentication and encryption



Most wireless networks use some kind of security settings. These security settings define the authentication (how the device identifies itself to the network) and encryption (how the data is encrypted as it is sent on the network). If you do not correctly specify these options when you are configuring your Brother wireless device, it will not be able to connect to the wireless network. Therefore care must be taken when configuring these options. Please refer to the information below to see which authentication and encryption methods your Brother wireless device supports.

### Authentication methods

The Brother machine supports the following methods:

- Open system

  Wireless devices are allowed access the network without any authentication.
- Shared key

  A secret pre-determined key is shared by all devices that will access the wireless network.
  The Brother machine uses the WEP keys as the pre-determined key.
- WPA-PSK

  Enables a Wi-Fi Protected Access Pre-shared key (WPA PSK), which enables the Brother wireless machine to associate with access points using TKIP encryption (WPA-Personal). (See *Connected to wireless capable computer with an access point in the network (Infrastructure mode)* on page 1-5.)

### Encryption methods

Encryption is used to secure the data that is sent over the wireless network. The Brother machine supports the following encryption methods:

- None

  No encryption method is used.
- WEP

  By using WEP (Wired Equivalent Privacy), the data is transmitted and received with a secure key.
- TKIP

  TKIP (Temporal Key Integrity Protocol) provides per-packet key mixing a message integrity check and re-keying mechanism.
- If you have previously configured the wireless settings of the machine, you must reset the network (LAN) settings before you can configure the wireless settings again. (See *Restoring the network settings to factory default* on page 4-28)

### Network key

There are some rules for each security method:

- Open system/Shared key with WEP
  This key is a 64-bit or 128-bit value that must be entered in an ASCII or HEXADECIMAL format.
  - 64 (40) bit ASCII: Uses 5 text characters.
    e.g. “WLLAN” (this is case sensitive).
  - 64 (40) bit hexadecimal: Uses 10 digits of hexadecimal data.
    e.g. “71f2234aba”
  - 128 (104) bit ASCII: Uses 13 text characters.
    e.g. “Wirelesscomms” (this is case sensitive)
  - 128 (104) bit hexadecimal: Uses 26 digits of hexadecimal data
    e.g. “71f2234ab56cd709e5412aa2ba”
- WPA-PSK and TKIP
  Uses a Pre-Shared Key (PSK) that is more than 7 and less than 64 characters in length.

# Configuring your machine in a wireless network

There are three methods to configure your wireless network machine; by using the machine control panel (recommended), using the SecureEasySetup™ software and using the automatic installer application on the CD-ROM.

## Using the Setup Wizard from the control panel LAN menu for a wireless network

You can configure your print server by using the **Setup Wizard** function. This is located in the **LAN** menu on the machine’s control panel. See to the steps below for further information.

- Before starting, make sure if your access point (router) or your computer is powered on.
- Make sure that the `Network I/F` is set to `WLAN`. (See *6.Network I/F* on page 4-26)
- If you like to connect your machine to your computer in Ad-hoc mode, we recommend you prepare the wireless network with your computer before you start the wireless wizard.

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. Press ▲ or ▼ to select `3.Setup WLAN`.
   Press **Set**.

**4** Press ▲ or ▼ to select `1.Setup Wizard`.
Press **Set**.

```
Setup WLAN
1.Setup Wizard
```

**5** The machine will search for a wireless network name (SSID) around the machine.

```
Searching SSID
```

**6** After a few seconds, you can select the SSID from the list using ▲ or ▼. Press **Set** to select the SSID.
If your SSID is displayed and you have selected it, go to Step 11.
If you want to add a new SSID, go to Step 7.

```
Select SSID&Set
Brother
```

**7** Select `<New SSID>` using ▲ or ▼.

```
Select SSID&Set
<New SSID>
```

Press **Set**.

**8** Enter a new SSID using ▲ or ▼. You can use **Enlarge/Reduce** key or **Number of copies** key to scroll left or right.

```
SSID:_
[←]          [→]
```

Press **Set**.

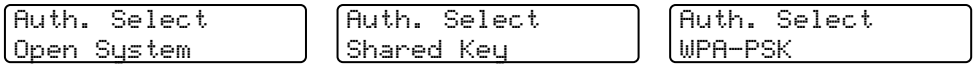
**9** Using ▲ or ▼, select `Infrastructure` when instructed.

```
Mode Select
Ad-hoc
```

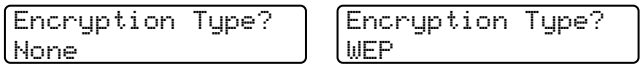
```
Mode Select
Infrastructure
```

Press **Set**.
If you select `Ad-hoc`, go to Step 11.

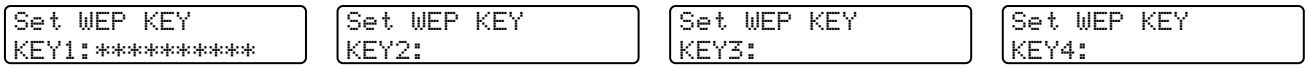
**10** Select the Authentication method using ▲ or ▼, and press **Set**.
If you select `Open System`, go to Step 11.
If you select `Shared Key`, go to Step 12.
If you select `WPA-PSK`, go to Step 13.




**11** Select the Encryption type, `None` or `WEP` using ▲ or ▼, and press **Set**.
If you select `None`, go to Step 17.
If you select `WEP`, go to Step 12.

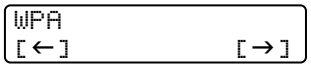



**12** Select the key option; `KEY1`, `KEY2`, `KEY3`, `KEY4` using ▲ or ▼, and press **Set**.

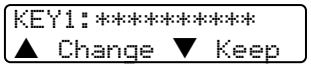



If you select the key which shows **********, go to Step 14.
If you select a blank key, go to Step 15.

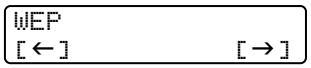
**13** Enter a new WPA key. Press **Set**. Go to Step 17.




**14** If you want to change the key you selected in Step 12, select `Change` using ▲ or ▼. Press **Set**. Go to Step 15.
If you want to keep the key you selected in Step 12, select `Keep` using ▲ or ▼. Press **Set**. Go to Step 16.




**15** Enter a new WEP key using ▲ or ▼. You can use **Enlarge/Reduce** key or **Number of copies** key to scroll left or right.




Press **Set**. Go to Step 17.

**16** The following will be displayed.

```
KEY1 selected
with no change
```



**17** To apply the settings, use ▲ or ▼ to select `Yes`, and press **Set**. To cancel, select `No`.
If you select `Yes`, go to Step 18.
If you select `No`, go back to Step 2.

```
Apply Settings?
▲ Yes ▼ No
```

**18** The machine will connect to the wireless network you specified.

```
Connecting WLAN
```

**19** If you wireless network is connected successfully, the display shows `Connected` for 2 seconds and configuration is completed.

```
Connected
```

**20** If the connection failed, the display shows `Connection Error` for 2 seconds. See *Wireless network troubleshooting* on page 7-8.

### (For MFC-640CW)

**1** Press **Menu/Set**, **5**, **3**, **1**.

```
Setup WLAN
1.Setup Wizard
```

**2** The machine will search for a wireless network name (SSID) around the machine.

```
Searching SSID
```

**3** After a few seconds, you can select the SSID from the list using ▲ or ▼. Press **Set** to select the SSID.
If your SSID is displayed and you have selected it, go to Step 8.
If you want to add a new SSID, go to Step 4.

```
Select SSID&Set
Brother
```

**4** Select <New SSID> using ▲ or ▼.

```
Select SSID&Set
<New SSID>
```

Press **Set**.

**5** Enter the SSID. (For further information on entering text, see *Entering Text (for MFC-640CW and MFC-820CW)* on page B-10.)

```
SSID:
_
```

Press **Set**.

**6** Using ▲ or ▼, select Infrastructure when instructed.

```
Mode Select
Ad-hoc
```

```
Mode Select
Infrastructure
```

Press **Set**.
If you select Ad-hoc, go to Step 8.

**7** Select the Authentication method using ▲ or ▼, and press **Set**.
If you select Open System, go to Step 8.
If you select Shared Key, go to Step 9.
If you select WPA-PSK, go to Step 10.

```
Auth. Select
Open System
```

```
Auth. Select
Shared Key
```

```
Auth. Select
WPA-PSK
```

**8** Select the Encryption type, None or WEP using ▲ or ▼, and press **Set**.
If you select None, go to Step 14.
If you select WEP, go to Step 9.

```
Encryption Type?
None
```

```
Encryption Type?
WEP
```

**9** Select the key option; KEY1, KEY2, KEY3, KEY4 using ▲ or ▼, and press **Set**.

| | | | |
|---|---|---|---|
| Set WEP KEY<br>KEY1:********** | Set WEP KEY<br>KEY2: | Set WEP KEY<br>KEY3: | Set WEP KEY<br>KEY4: |

If you select the key which shows **********, go to Step 11.
If you select a blank key, go to Step 12.

**10** Enter a new WPA key. Press **Set**. Go to Step 14.

```
WPA
_
```

**11** If you want to change the key you selected in Step 9, select 1.Change. Press **Set**. Go to Step 12.
If you want to keep the key you selected in Step 9, select 2.Keep. Press **Set**. Go to Step 13.

```
KEY1:**********
1.Change 2.Keep
```

**12** Enter a new WEP key. Press **Set**. Go to Step 14.

```
WEP
_
```

**13** The following will be displayed.

```
KEY1 selected
with no change
```

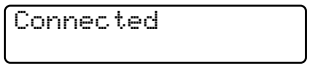
**14** To apply the settings, use ▲ or ▼ to select 1.Yes, and press **Set**. To cancel, select 2.No.
If you select 1.Yes, go to Step 15.
If you select 2.No, go back to Step 2.

```
Apply Settings?
1.Yes 2.No
```

**15** The machine will connect to the wireless device you specified.

```
Connecting WLAN
```

**16** If your wireless network is connected successfully, the display shows `Connected` for 2 seconds and configuration is completed.




If the connection failed, the display shows `Connection Error` for 2 seconds. See *Wireless network troubleshooting* on page 7-8.



### (For MFC-820CW)

**1** Press **Menu**.

**2** Press ▲ or ▼ to select `LAN`.
Press **OK**.

**3** Press ▲ or ▼ to select `Setup WLAN`.
Press **OK**.

**4** Press ▲ or ▼ to select `Setup Wizard`.
Press **OK**.

**5** The machine will search for a wireless network name (SSID) around the machine.

**6** After a few seconds, you can select the SSID from the list using ▲ or ▼. Press **OK** to select the SSID.
If you select the SSID displayed, go to Step 11.
If you want to add a new SSID, go to Step 7.

**7** Select `<New SSID>` using ▲ or ▼.
Press **OK**.

**8** Enter the SSID. (For further information on entering text, see *Entering Text (for MFC-640CW and MFC-820CW)* on page B-10.)
Press **OK**.

**9** Using ▲ or ▼, select `Infrastructure` when instructed.
Press **OK**.
If you select `Ad-hoc`, go to Step 11.

**10** Select the Authentication method using ▲ or ▼, and press **OK**.
If you select `Open System`, go to Step 11.
If you select `Shared Key`, go to Step 12.
If you select `WPA-PSK`, go to Step 13.

**11** Select the Encryption type, `None` or `WEP` using ▲ or ▼, and press **OK**.
If you select `None`, go to Step 17.
If you select `WEP`, go to Step 12.

**12** Select the key option; `KEY1`, `KEY2`, `KEY3`, `KEY4` using ▲ or ▼, and press **OK**.
If you select the key which shows **********, go to Step 14.
If you select a blank key, go to Step 15.

**13** Enter a new WPA key. Press **OK**. Go to Step 17.

**14** If you want to change the key you selected in Step 12, press ▲ or ▼ to select `Change`.
Press **OK**. Go to Step 15.
If you want to keep the key you selected in Step 12, press ▲ or ▼ to select `Keep`.
Press **OK**. Go to Step 16.

**15** Enter a new WEP key. Press **OK**. Go to Step 17.

**16** The following will be displayed.

**17** To apply the settings, press **1** to select `Yes`. To cancel, press **2** to select `No`.
If you select **1** for `Yes`, go to Step 18.
If you select **2** for `No`, go back to Step 5.

**18** The machine will connect to the wireless device you specified.

**19** If your wireless network is connected successfully, the display shows `Connected` for 2 seconds and configuration is completed.

If the connection failed, the display shows `Connection Error` for 2 seconds. See *Wireless network troubleshooting* on page 7-8.

## Using the SecureEasySetup™ software to configure your machine in a wireless network

The SecureEasySetup™ software is an easy way to configure your wireless network. By pushing a button on the wireless router or access point, you can setup and secure your wireless network. Your router or access point must also support SecureEasySetup™. To configure your router or access point for SecureEasySetup™, see the user's guide that came with the product.

**Note**

Routers or access points that support SecureEasySetup™ will have the following logo displayed on the product:




### (For DCP-340CW)

1. Temporarily place the machine with 50 cm/20 in. range of the access point.
2. Push the SecureEasySetup™ button on your wireless router or access point.
3. Press **Menu** on the control panel of the Brother machine.
4. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
5. Press ▲ or ▼ to select `3.Setup WLAN`.
   Press **Set**.
6. Press ▲ or ▼ to select `2.SecurEasySetup`.
   Press **Set**.
7. The wireless network connection status will be displayed and will show either; `Connecting WLAN`, `Connected` or `Connection Error`.

   `Connecting WLAN` is displayed when the print server is trying to make a connection to your router or access point.

`Connected` is displayed when the print server is successfully connected to your router or access point. You can now use your machine in a wireless network.

`Connection Error` is displayed when the print server has not connected to your router or access point. Restart from Step 1.
If the same message is displayed again, reset the print server back to the default factory settings (Page 4-28) and try again.

8 Press **Stop/Exit**.

## (For MFC-640CW)

1 Temporarily place the machine within 50 cm/20 in. range of the access point.

2 Push the SecureEasySetup™ button on your wireless router or access point.

3 Press **Menu/Set**, **5**, **3**, **2** on the control panel of the Brother machine.

4 The wireless network connection status will be displayed and will show either; `Connecting WLAN`, `Connected` or `Connection Error`.

`Connecting WLAN` is displayed when the print server is trying to make a connection to your router or access point.

`Connected` is displayed when the print server is successfully connected to your router or access point. You can now use your machine in a wireless network.

`Connection Error` is displayed when the print server has not connected to your router or access point. Restart from Step 1.
If the same message is displayed again, reset the print server back to the default factory settings (Page 4-28) and try again.

Press **Stop/Exit**.

## (For MFC-820CW)

1 Temporarily place the machine within 50 cm/20 in. range of the access point.

2 Push the SecureEasySetup™ button on your wireless router or access point.

3 Press **Menu** on the control panel of the Brother machine.

4 Press ▲ or ▼ to select `LAN`.
Press **OK**.

5 Press ▲ or ▼ to select `Setup WLAN`.
Press **OK**.

6 Press ▲ or ▼ to select `SecureEasySetup`.
Press **OK**.

7 The wireless network connection status will be displayed and will show either; `Connecting WLAN`, `Connected` or `Connection Error`.

`Connecting WLAN` is displayed when the print server is trying to make a connection to your router or access point.

`Connected` is displayed when the print server is successfully connected to your router or access point. You can now use your machine in a wireless network.

`Connection Error` is displayed when the print server has not connected to your router or access point. Restart from Step 1.
If the same message is displayed again, reset the print server back to the default factory settings (Page 4-28) and try again.

## Using the Brother automatic installer application in the CD-ROM to configure your machine for a wireless network

See *Chapter 8* (for Windows) and *Chapter 9* (for Macintosh) for information on how to use the Brother automatic installer application in the CD-ROM we have provided with the machine.

# Changing the print server settings

Once you have configured your machine for a wireless network, you can change the wireless settings using the BRAdmin Professional utility, the Remote Setup software or the control panel on the front of the Brother machine.

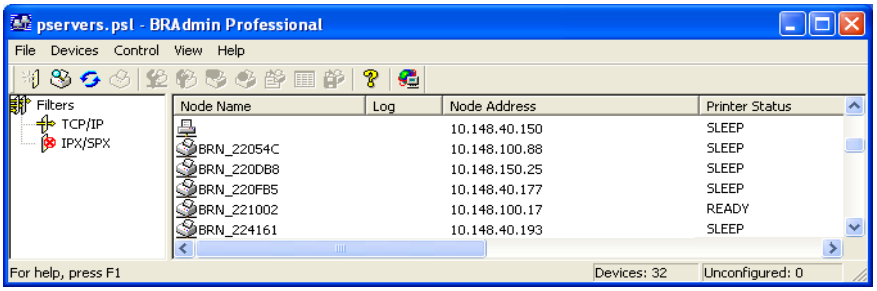
## Using the BRAdmin Professional utility to change the print server settings (for Windows® only)

**Note**

- Please use the BRAdmin Professional utility version that was supplied on the CD-ROM with your Brother product. You can also download the latest Brother BRAdmin Professional utility version from http://solutions.brother.com. This utility is only available for Windows® users.

- If you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows® XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.
- Node name: Node name appears in current BRAdmin Professional window. The default Node name is “BRW_xxxxxx” ("xxxxxx" is the last six digits of Ethernet address.).

**1** Start the BRAdmin Professional utility (from Windows® 98/98SE/Me/2000/XP), by clicking **Start** / **Programs** / **Brother Administrator Utilities** / **Brother BRAdmin Professional Utilities** / **BRAdmin Professional**.




**Note**

- If the print server is set to its factory default settings without using a DHCP/BOOTP/RARP server, the device will appear as APIPA in the BRAdmin Professional utility screen.
- You can find the node name and Ethernet address (**Node Address** above) by printing out the Network Configuration List. See *Printing the Network Configuration List* on page 4-27 for information on how to print the Network Configuration List on your print server.

**2** Select **TCP/IP** in the left frame of the main BRAdmin window.

**3** Select the print server which you want to configure, in the right frame of the main BRAdmin window.

**4** Select **Configure Wireless Setting** from the **Control** menu.

**5** Enter a password if you have set it.

**Note**

By default, no password is required to change the print server settings. You can set a password to change the print server settings. Double click the device you want to set a password. Click **Control** tab, and then click **Change Password**. Enter the new password.

**6** You can now change the print server settings.

## Using the Remote Setup to change the print server settings (for Windows® and Mac OS® X 10.2.4 or greater) (not available for DCP-340CW)

### Remote Setup for Windows®

The Remote Setup application allows you to configure network settings from a Windows® application. When you access this application, the settings on your machine will be downloaded automatically to your PC and displayed on your PC screen. If you change the settings, you can upload them directly to the machine.

1. Click the **Start** button, **All Programs**, **Brother**, **MFL-Pro Suite MFC-XXXX**, **Remote Setup**, then **MFC-XXXX LAN** (where XXXX is your model name).
2. Click **TCP/IP (WLAN)**, **Setup WLAN**, **WLAN Status** or **Setup Misc**.
3. You can now change the print server settings.

### Setup for Macintosh®

The Remote Setup application allows you to configure many MFC settings from a Macintosh® application. When you access this application, the settings on your machine will be downloaded automatically to your Macintosh® and displayed on your Macintosh® screen. If you change the settings, you can upload them directly to the machine.

1. Double click the **Macintosh HD** icon on your desktop, **Library**, **Printers**, **Brother**, then **Utilities**.
2. Double click the **Remote Setup** icon.
3. Click **TCP/IP (WLAN)**, **Setup WLAN**, **WLAN Status** or **Setup Misc**.
4. You can now change the print server settings.

## Using the control panel LAN menu to change the print server settings

You can configure and change the print server settings using the control panel LAN menu. See *Control panel setup* on page 4-1.

## Using other methods to configure your machine for a wireless network

You can configure your machine for a wireless network using other methods. See *Other ways to set the IP address (for advanced users and administrators)* on page A-1.

# 4 Control panel setup

## LAN menu



Before using your Brother product in a network environment, you need to configure the correct TCP/IP settings. For more information, see *Configuring your machine for a network with an Ethernet cable connection* on page 2-1 or *Configuring your machine for a wireless network* on page 3-1.

In this chapter, you will learn how to configure the network settings using the control panel, located on the front of the machine.

The LAN menu selections of the control panel allow you to set up the Brother machine for your network configuration. Press **Menu/Set,** then press the appropriate number, **5** for LAN for example. Proceed to the menu selection you wish to configure. See *Function table and default factory settings* on page B-4.

Please note that the machine is supplied with the BRAdmin Professional Windows® software and Remote Setup applications for Windows® and Macintosh®, which also can be used to configure many aspects of the network. See *Changing the print server settings* on page 2-5 for wired connection or *Changing the print server settings* on page 3-13 for wireless connection.

### 1.TCP/IP (Wired) / 2.TCP/IP (WLAN)

If you connect the machine with the Ethernet cable to your network, use the **TCP/IP (Wired)** menu selections. If you connect the machine to the wireless Ethernet network, use the **TCP/IP (WLAN)** menu selections.

This menu has nine sections: **Boot Method**, **IP Address**, **Subnet Mask**, **Gateway**, **Node Name**, **WINS Config**, **WINS Server**, **DNS Server** and **APIPA**.

#### 1.BOOT Method

This selection controls how the machine obtains the IP address for itself. The default setting is `Auto`.

#### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
   Press **Set**.
4. Press ▲ or ▼ to select `1.BOOT Method`.
   Press **Set**.
5. Press ▲ or ▼ to select `Auto`, `Static`, `RARP`, `BOOTP` or `DHCP`.
   Press **Set**.

6 Press **Stop/Exit**.



### (For MFC-640CW)

1 (For Wired) Press **Menu/Set**, **5**, **1**, **1**.
(For Wireless) Press **Menu/Set**, **5**, **2**, **1**.

2 Press ▲ or ▼ to select `Auto`, `Static`, `RARP`, `BOOTP` or `DHCP`.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `BOOT Method`.
Press **OK**.

5 Press ▲ or ▼ to select `Auto`, `Static`, `RARP`, `BOOTP` or `DHCP`.
Press **OK**.

6 Press **Stop/Exit**.

#### Auto mode

In this mode, the machine will scan the network for a DHCP server, if it can find one, and if the DHCP server is configured to allocate an IP address to the machine, then the IP address supplied by the DHCP server will be used. If no DHCP server is available, then the machine will scan for a BOOTP server. If a BOOTP server is available, and it is configured correctly, the machine will take its IP address from the BOOTP server. If a BOOTP server is not available, the machine will scan for a RARP server. If a RARP server also does not answer, the IP Address is scanned through APIPA facility, see *Using APIPA to configure the IP address* on page A-3. After it is initially powered ON, it may take a few minutes for the machine to scan the network for a server.

### Static mode

In this mode the machine's IP address must be manually assigned. Once entered the IP address is locked to the assigned address.

### RARP mode

The Brother print server IP address can be configured using the Reverse ARP (RARP) service on your host computer. This is done by editing the /etc/ethers file (if this file does not exist, you can create it) with an entry similar to the following: ("BRN" below is "BRW" for a wireless network.)

```
00:80:77:31:01:07    BRN_310107
```

Where the first entry is the Ethernet address of the print server and the second entry is the name of the print server (the name must be the same as the one you put in the /etc/hosts file).

If the rarp daemon is not already running, start it (depending on the system the command can be rarpd, rarpd -a, in.rarpd -a or something else; type man rarpd or refer to your system documentation for additional information). To verify that the rarp daemon is running on a Berkeley UNIX® based system, type the following command:

```
ps -ax | grep -v grep | grep rarpd
```

For AT&T UNIX® based systems, type:

```
ps -ef | grep -v grep | grep rarpd
```

The Brother print server will get the IP address from the rarp daemon when it is powered on.

### BOOTP mode

BOOTP is an alternative to rarp that has the advantage of allowing configuration of the subnet mask and gateway. In order to use BOOTP to configure the IP address make sure that BOOTP is installed and running on your host computer (it should appear in the /etc/services file on your host as a real service; type man bootpd or refer to your system documentation for information). BOOTP is usually started up via the /etc/inetd.conf file, so you may need to enable it by removing the "#" in front of the bootp entry in that file. For example, a typical bootp entry in the /etc/inetd.conf file would be:

```
#bootp dgram udp wait /usr/etc/bootpd bootpd -i
```

**Note**

Depending on the system, this entry might be called "bootps" instead of "bootp".

In order to enable BOOTP, simply use an editor to delete the "#" (if there is no "#", then BOOTP is already enabled). Then edit the BOOTP configuration file (usually /etc/bootptab) and enter the name, network type (1 for Ethernet), Ethernet address and the IP address, subnet mask and gateway of the print server. Unfortunately, the exact format for doing this is not standardized, so you will need to refer to your system documentation to determine how to enter this information (many UNIX® systems also have template examples in the bootptab file that you can use for reference). Some examples of typical /etc/bootptab entries include: ("BRN" below is "BRW" for a wireless network.)

```
BRN_310107 1   00:80:77:31:01:07 192.189.207.3
```

and:

```
BRN_310107:ht=ethernet:ha=008077310107:\
ip=192.189.207.3:
```



Certain BOOTP host software implementations will not respond to BOOTP requests if you have not included a download filename in the configuration file; if this is the case, simply create a null file on the host and specify the name of this file and its path in the configuration file.

As with rarp, the print server will load its IP address from the BOOTP server when the printer is powered on.

### DHCP mode

Dynamic Host Configuration Protocol (DHCP) is one of several automated mechanisms for IP address allocation. If you have a DHCP server in your network (typically a UNIX®, Windows® 2000/XP network) the print server will automatically obtain its IP address from a DHCP server and register its name with any RFC 1001 and 1002 compliant dynamic name services.

**Note**

If you do not want your print server configured via DHCP, BOOTP or RARP, you must set the BOOT METHOD to static, this will prevent the print server from trying to obtain an IP address from any of these systems. To change the BOOT METHOD, use the machine's control panel or the BRAdmin Professional utility.

## 2.IP Address

This field displays the current IP address of the machine. If you have selected a BOOT Method of Static, enter the IP address that you wish to assign to the machine (check with your network administrator for the IP address to use). If you have selected a method other than Static, the machine will attempt to determine its IP address using the DHCP or BOOTP protocols. The default IP address of your machine will probably be incompatible with the IP address numbering scheme of your network. We recommend that you contact your network administrator for an IP address for the network the unit will be connected on.

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
   Press **Set**.

4 Press ▲ or ▼ to select `2.IP Address`.
Press **Set**.

5 Press ▲ or ▼ to select **1** to change.
Press **Set**.

6 Press ▲ repeatedly to enter the first three-digit number of the IP address.
Press **Set**.
Repeat this step until you have entered the fourth three-digit number to complete the IP address.

**Note**

Each number can also be increased / decreased by holding down ▲ or ▼.

7 Press **Stop/Exit**.

### (For MFC-640CW)

1 (For Wired) Press **Menu/Set**, **5**, **1**, **2**.
(For Wireless) Press **Menu/Set**, **5**, **2**, **2**.

2 Select **1** to change. Enter the IP address.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `IP Address`.
Press **OK**.

5 Press ▲ or ▼ to select `Change`.
Press **OK**.

6 Enter the IP address.
Press **OK**.

7 Press **Stop/Exit**.



### 3.Subnet Mask

This field displays the current subnet mask used by the machine. If you are not using DHCP or BOOTP to obtain the subnet mask, enter the desired subnet mask. Check with your network administrator for the subnet mask to use.

### (For DCP-340CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `3.LAN`.
Press **Set**.

3 (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
Press **Set**.

4 Press ▲ or ▼ to select `3.Subnet Mask`.
Press **Set**.

5 Press ▲ or ▼ to select **1** to change.
Press **Set**.

6 Press ▲ repeatedly to enter the first three-digit number for the Subnet Mask address.
Press **Set**.
Repeat this step until you have entered the fourth three-digit number to complete the Subnet Mask address.

**Note**

Each number can also be increased / decreased by holding down ▲ or ▼.

7 Press **Stop/Exit**.

### (For MFC-640CW)

1. (For Wired) Press **Menu/Set**, **5**, **1**, **3**.
   (For Wireless) Press **Menu/Set**, **5**, **2**, **3**.
2. Select **1** to change. Enter the Subnet Mask address.
3. Press **Menu/Set**.
4. Press **Stop/Exit**.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `LAN`.
   Press **OK**.
3. (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
   Press **OK**.
4. Press ▲ or ▼ to select `Subnet Mask`.
   Press **OK**.
5. Press ▲ or ▼ to select `Change`.
   Press **OK**.
6. Enter the Subnet Mask address.
   Press **OK**.
7. Press **Stop/Exit**.

## 4.Gateway

This field displays the current gateway or router address used by the machine. If you are not using DHCP or BOOTP to obtain the gateway or router address, enter the address you wish to assign. If you do not have a gateway or router, leave this field blank. Check with your network administrator if you are unsure.

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.

3 (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
Press **Set**.

4 Press ▲ or ▼ to select `4.Gateway`.
Press **Set**.

5 Press ▲ or ▼ to select **1** to change.
Press **Set**.

6 Press ▲ repeatedly to enter the first three-digit number for the Gateway address.
Press **Set**.
Repeat this step until you have entered the fourth three-digit number to complete the Gateway address.

**Note**

Each number can also be increased / decreased by holding down ▲ or ▼.

7 Press **Stop/Exit**.

### (For MFC-640CW)

1 (For Wired) Press **Menu/Set**, **5**, **1**, **4**.
(For Wireless) Press **Menu/Set**, **5**, **2**, **4**.

2 Select **1** to change. Enter the Gateway address.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `Gateway`.
Press **OK**.

5 Press ▲ or ▼ to select `Change`.
Press **OK**.

6 Enter the Gateway address.
Press **OK**.

7 Press **Stop/Exit**.



### 5.Node Name

You can register the machine name on the Network. This name is often referred to as a NetBIOS name; it will be the name that is registered by the WINS server on your network. Brother recommends the name BRN_xxxxxx for a wired network or BRW_xxxxxx for a wireless network (where XXXXXX is the last six digits of the Ethernet address) (up to 15 characters).

**(For DCP-340CW)**

1 Press **Menu**.

2 Press ▲ or ▼ to select `3.LAN`.
Press **Set**.

3 (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
Press **Set**.

4 Press ▲ or ▼ to select `5.Node Name`.
Press **Set**.

5 Press ▲ or ▼ to select **1** to change.
Press **Set**.

6 The Node Name will be displayed.

7 Press **Stop/Exit**.

**Note**

DCP-340CW cannot change the Node Name from the control panel menu, however the BRAdmin Professional utility enables you to change the IP address. See *Using the BRAdmin Professional utility to change the print server settings (for Windows® only)* on page 2-5.

### (For MFC-640CW)

1. (For Wired) Press **Menu/Set**, **5**, **1**, **5**.
   (For Wireless) Press **Menu/Set**, **5**, **2**, **5**.
2. Select **1** to change. Enter the Node Name.
3. Press **Menu/Set**.
4. Press **Stop/Exit**.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `LAN`.
   Press **OK**.
3. (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
   Press **OK**.
4. Press ▲ or ▼ to select `Node Name`.
   Press **OK**.
5. Press ▲ or ▼ to select `Change`.
   Press **OK**.
6. Enter the Node Name.
   Press **OK**.
7. Press **Stop/Exit**.

## 6.WINS Config

This selection controls how the machine obtains the IP address of the WINS server.

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.

3 (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
Press **Set**.

4 Press ▲ or ▼ to select `6.WINS Config`.
Press **Set**.

5 Press ▲ or ▼ to select `Auto` or `Static`.
Press **Set**.

6 Press **Stop/Exit**.

### (For MFC-640CW)

1 (For Wired) Press **Menu/Set**, **5**, **1**, **6**.
(For Wireless) Press **Menu/Set**, **5**, **2**, **6**.

2 Press ▲ or ▼ to select `Auto` or `Static`.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `WINS Config`.
Press **OK**.

5 Press ▲ or ▼ to select `Auto` or `Static`.
Press **OK**.

6 Press **Stop/Exit**.

**Auto**

Automatically uses a DHCP request to determine the IP addresses for the primary and secondary WINS servers. You must set the BOOT Method to Auto for this feature to work.

**Static**

Uses a specified IP address for the primary and secondary WINS servers.

### 7.WINS Server

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
   Press **Set**.
4. Press ▲ or ▼ to select `7.WINS Server`.
   Press **Set**.
5. Press ▲ or ▼ to select `Primary` or `Secondary`.
   Press **Set**.
6. Press ▲ repeatedly to enter the first three-digit number for the WINS Server address.
   Press **Set**.
   Repeat this step until you have entered the fourth three-digit number to complete the WINS Server address.

**Note**

Each number can also be increased / decreased by holding down ▲ or ▼.

7. Press **Stop/Exit**.

### (For MFC-640CW)

1. (For Wired) Press **Menu/Set**, **5**, **1**, **7**.
   (For Wireless) Press **Menu/Set**, **5**, **2**, **7**.
2. Press ▲ or ▼ to select `Primary` or `Secondary`.

3 Press **Menu/Set**.

4 Enter the WINS Server address.

5 Press **Menu/Set**.

6 Press **Stop/Exit**.



### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `WINS Server`.
Press **OK**.

5 Press ▲ or ▼ to select `Primary` or `Secondary`.
Press **OK**.

6 Press ▲ or ▼ to select `Change`.
Press **OK**.

7 Enter the WINS Server address.
Press **OK**.

8 Press **Stop/Exit**.

#### Primary WINS Server IP Address

This field specifies the IP address of the primary WINS (Windows® Internet Naming Service) server. If set to a non-zero value, the machine will contact this server to register its name with the Windows® Internet Name Service.

### Secondary WINS Server IP Address

This field specifies the IP address of the secondary WINS server. It is used as a backup to the Primary WINS server address. If the Primary server is unavailable, the machine still can register itself with a secondary server. If set to a non-zero value, the machine will contact this server to register its name with the Windows® Internet Name Service. If you have a primary WINS server, but no secondary WINS server, simply leave this field blank.

## 8.DNS Server

## (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
   Press **Set**.
4. Press ▲ or ▼ to select `8.DNS Server`.
   Press **Set**.
5. Press ▲ or ▼ to select `Primary` or `Secondary`.
   Press **Set**.
6. Press ▲ repeatedly to enter the first three-digit number for the DNS Server address.
   Press **Set**.
   Repeat this step until you have entered the fourth three-digit number to complete the DNS Server address.

**Note**

Each number can also be increased / decreased by holding down ▲ or ▼.

7. Press **Stop/Exit**.

## (For MFC-640CW)

1. (For Wired) Press **Menu/Set**, **5**, **1**, **8**.
   (For Wireless) Press **Menu/Set**, **5**, **2**, **8**.
2. Press ▲ or ▼ to select `Primary` or `Secondary`.

3 Press **Menu/Set**.

4 Enter the DNS Server address.

5 Press **Menu/Set**.

6 Press **Stop/Exit**.



### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `DNS Server`.
Press **OK**.

5 Press ▲ or ▼ to select `Primary` or `Secondary`.
Press **OK**.

6 Press ▲ or ▼ to select `Change`.
Press **OK**.

7 Enter the DNS Server address.
Press **OK**.

8 Press **Stop/Exit**.

#### Primary DNS Server IP Address

This field specifies the IP address of the primary DNS (Domain Name Service) server.

#### Secondary DNS Server IP Address

This field specifies the IP address of the secondary DNS server. It is used as a backup to the Primary DNS server address. If the Primary server is unavailable, the machine will contact the Secondary DNS server.

## 9.APIPA

The setting of On will cause the print server to automatically allocate a Link-Local IP address in the range (169.254.1.0 - 169.254.254.255) when the print server cannot obtain an IP address through the BOOT Method you have set (see *1.BOOT Method* on page 4-1). Selecting Off means the IP address doesn't change, when the print server cannot obtain an IP address through the BOOT Method you have set.



### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. (For Wired) Press ▲ or ▼ to select `1.TCP/IP(Wired)`.
   (For Wireless) Press ▲ or ▼ to select `2.TCP/IP(WLAN)`.
   Press **Set**.
4. Press ▲ or ▼ to select `9.APIPA`.
   Press **Set**.
5. Press ▲ or ▼ to select `On` or `Off`.
   Press **Set**.
6. Press **Stop/Exit**.

### (For MFC-640CW)

1. (For Wired) Press **Menu/Set**, **5**, **1**, **9**.
   (For Wireless) Press **Menu/Set**, **5**, **2**, **9**.
2. Press ▲ or ▼ to select `On` or `Off`.
3. Press **Menu/Set**.
4. Press **Stop/Exit**.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `LAN`.
   Press **OK**.

3 (For Wired) Press ▲ or ▼ to select `TCP/IP(Wired)`.
(For Wireless) Press ▲ or ▼ to select `TCP/IP(WLAN)`
Press **OK**.

4 Press ▲ or ▼ to select `APIPA`.
Press **OK**.

5 Press ▲ or ▼ to select `On` or `Off`.
Press **OK**.

6 Press **Stop/Exit**.

## 3.Setup WLAN (for wireless network only)

### 1.Setup Wizard

The **Setup Wizard** guides you through the wireless network configuration. For more information, see *Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3.

### 2.SecureEasySetup

The SecureEasySetup™ software allows you to configure the wireless network easier than configuring it manually. By pushing a button on the wireless router or access point, you can complete setup and secure the wireless network. Your router or access point must also support SecureEasySetup™. See *Using the SecureEasySetup™ software to configure your machine in a wireless network* on page 3-11.

## 4.WLAN Status (for wireless network only)

### 1.Status

This field displays the current wireless network status; `Active (802.11b)`, `Active (802.11g)`, `Searching SSID` or `Disabled`.

### (For DCP-340CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `3.LAN`.
Press **Set**.

3 Press ▲ or ▼ to select `4.WLAN Status`.
Press **Set**.

4 Press ▲ or ▼ to select `1.Status`.
Press **Set**.

5 The current wireless network status will be displayed; `Active (802.11b)`, `Active (802.11g)`, `Searching SSID` or `Disabled`.

6 Press **Stop/Exit**.

### (For MFC-640CW)

1 Press **Menu/Set**, **5**, **4**, **1**.

2 The current wireless network status will be displayed; `Active (802.11b)`, `Active (802.11g)`, `Searching SSID` or `Disabled`.

3 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 Press ▲ or ▼ to select `WLAN Status`.
Press **OK**.

4 Press ▲ or ▼ to select `Status`.
Press **OK**.

5 The current wireless network status will be displayed; `Active (802.11b)`, `Active (802.11g)`, `Disabled` or `Searching SSID`.

6 Press **Stop/Exit**.

### 2.Signal

This field displays the current wireless network signal strength; Strong, Medium, Weak or None.



### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select 3.LAN.
   Press **Set**.
3. Press ▲ or ▼ to select 4.WLAN Status.
   Press **Set**.
4. Press ▲ or ▼ to select 2.Signal.
   Press **Set**.
5. The current wireless network signal strength will be displayed; Strong, Medium, Weak or None.
6. Press **Stop/Exit**.

### (For MFC-640CW)

1. Press **Menu/Set**, **5**, **4**, **2**.
2. The current wireless network signal strength will be displayed; Strong, Medium, Weak or None.
3. Press **Stop/Exit**.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select LAN.
   Press **OK**.
3. Press ▲ or ▼ to select WLAN Status.
   Press **OK**.
4. Press ▲ or ▼ to select Signal.
   Press **OK**.
5. The current wireless network signal strength will be displayed; Strong, Medium, Weak or None.

6 Press **Stop/Exit**.

### 3.SSID



This field displays the current wireless network SSID. The display shows less than 33 characters of the SSID name.

#### (For DCP-340CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `3.LAN`.
Press **Set**.

3 Press ▲ or ▼ to select `4.WLAN Status`.
Press **Set**.

4 Press ▲ or ▼ to select `3.SSID`.
Press **Set**.

5 The current wireless network SSID will be displayed.

6 Press **Stop/Exit**.

#### (For MFC-640CW)

1 Press **Menu/Set**, **5**, **4**, **3**.

2 The current wireless network SSID will be displayed.

3 Press **Stop/Exit**.

#### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 Press ▲ or ▼ to select `WLAN Status`.
Press **OK**.

4 Press ▲ or ▼ to select SSID.
Press **OK**.

5 The current wireless network SSID will be displayed.

6 Press **Stop/Exit**.



### 4.Comm.Mode

This field displays the current wireless network communication mode; Ad-hoc or Infrastructure.

### (For DCP-340CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select 3.LAN.
Press **Set**.

3 Press ▲ or ▼ to select 4.WLAN Status.
Press **Set**.

4 Press ▲ or ▼ to select 4.Comm.Mode.
Press **Set**.

5 The current wireless network communication mode will be displayed; Ad-hoc or Infrastructure.

6 Press **Stop/Exit**.

### (For MFC-640CW)

1 Press **Menu/Set**, **5**, **4**, **4**.

2 The current wireless network communication mode will be displayed; Ad-hoc or Infrastructure.

3 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select LAN.
Press **OK**.

3 Press ▲ or ▼ to select `WLAN Status`.
Press **OK**.

4 Press ▲ or ▼ to select `Comm. Mode`.
Press **OK**.

5 The current wireless network communication mode will be displayed; `Ad-hoc` or `Infrastructure`.

6 Press **Stop/Exit**.

### 5.Security Mode

This field displays the current wireless network security settings; authentication method and encryption mode settings.

#### (For DCP-340CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `3.LAN`.
Press **Set**.

3 Press ▲ or ▼ to select `4.WLAN Status`.
Press **Set**.

4 Press ▲ or ▼ to select `5.Security Mode`.
Press **Set**.

5 The current wireless network security settings will be displayed; `WEP`, `WPA-PSK` or `None`.

6 Press **Stop/Exit**.

#### (For MFC-640CW)

1 Press **Menu/Set**, **5**, **4**, **5**.

2 The current wireless network security settings will be displayed; `WEP`, `WPA-PSK` or `None`.

3 Press **Stop/Exit**.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `LAN`.
   Press **OK**.
3. Press ▲ or ▼ to select `WLAN Status`.
   Press **OK**.
4. Press ▲ or ▼ to select `Security Mode`.
   Press **OK**.
5. The current wireless network security settings will be displayed; `WEP` or `WPA-PSK` or `None`.
6. Press **Stop/Exit**.

## 5.Setup Misc.

### 1.Wired LAN (for wired network only)

Ethernet link mode. Auto allows the print server to operate in 100BaseTX full or half duplex, or in 10BaseT full or half duplex mode by auto negotiation.

100BASE-TX Full Duplex (100B-FD) or Half Duplex (100B-HD) and 10BASE-T Full Duplex (10B-FD) or Half Duplex (10B-HD) fix the print server link mode. This change is valid after the print server has been reset (default is `Auto`).

**Note**

If you incorrectly set this value, you may not be able to communicate with your print server.

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
3. Press ▲ or ▼ to select `5.Setup Misc.`.
   Press **Set**.
4. Press ▲ or ▼ to select `1.Wired LAN`.
   Press **Set**.

5 Press ▲ or ▼ to select `Auto/100B-FD/100B-HD/10B-FD/10B-HD`.
Press **Set**.

6 Press **Stop/Exit**.



### (For MFC-640CW)

1 Press **Menu/Set**, **5**, **5**, **1**.

2 Press ▲ or ▼ to select `Auto/100B-FD/100B-HD/10B-FD/10B-HD`.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.

### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 Press ▲ or ▼ to select `Setup Misc.`.
Press **OK**.

4 Press ▲ or ▼ to select `Wired LAN`.
Press **OK**.

5 Press ▲ or ▼ to select `Auto/100B-FD/100B-HD/10B-FD/10B-HD`.

6 Press **Stop/Exit**.

## 2.Time Zone (not available for DCP-340CW)

This field displays your country time zone. The time shown is the time difference between your country and Greenwich Mean Time. For example, the Time Zone for Eastern Time in the USA and Canada is GMT-05:00.

### (MFC-640CW)

1 Press **Menu/Set**, **5**, **5**, **2**.

2 Press ▲ or ▼ to enter the time.
Press **Set**.

3 Press **Menu/Set**.

4 Press **Stop/Exit**.



### (For MFC-820CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `LAN`.
Press **OK**.

3 Press ▲ or ▼ to select `Setup Misc.`.
Press **OK**.

4 Press ▲ or ▼ to select `Time Zone`.
Press **OK**.

5 Press ▲ or ▼ to enter the time.
Press **OK**.

6 Press **Stop/Exit**.

#### Windows® Time Zone Setting

You can determine the time difference for your location by using the Time Zone setting in Windows®.

1 Click on **Start**.

2 Select **Settings** / **Control Panel**.

3 Double click on **Date/Time**.

4 Select **Time Zone**.

5 Verify your time zone setting from the pull-down menu (this menu displays the time difference from GMT).

## 6.Network I/F



You can choose the network connection type, wired network connection or wireless network connection. If you want to use the wired network connection, select Wired LAN, and if you want to use the wireless network connection, select WLAN. You can only have one network connection type active at a time.

### (For DCP-340CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select 3.LAN.
   Press **Set**.
3. Press ▲ or ▼ to select 6.Network I/F.
   Press **Set**.
4. Press ▲ or ▼ to select Wired LAN or WLAN.
   Press **Set**.
5. If you change the current setting, press ▲ or ▼ to select 1.Yes to reboot the machine.
   If you do not change the current setting, press ▲ or ▼ to select 2.No to exit the menu.

### (For MFC-640CW)

1. Press **Menu/Set**, **5**, **6**.
2. Press ▲ or ▼ to select Wired LAN or WLAN.
3. If you change the current setting, select 1.Yes to reboot the machine.
   If you do not change the current setting, select 2.No to exit the menu.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select LAN.
   Press **OK**.
3. Press ▲ or ▼ to select Network I/F.
   Press **OK**.
4. Press ▲ or ▼ to select Wired LAN or WLAN.
   Press **OK**.

5 If you change the current setting, select **1** to reboot the machine.
If you do not change the current setting, select **2** to exit the menu.



# Printing the Network Configuration List

**Note**

Node name: Node name appears in the Network Configuration List. The default Node name is “BRN_xxxxxx" for a wired network or “BRW_xxxxxx” for a wireless network ("xxxxxx" is the last six digits of Ethernet address.).

The Network Configuration List prints a report listing all the current network configuration including the network print server settings.

### (For DCP-340CW)

1 Press **Menu**.

2 Press ▲ or ▼ to select `4.Print Reports`.
Press **Set**.

3 Press ▲ or ▼ to select `3.Network Config`.
Press **Set**.

4 Press **Mono Start** or **Color Start**.

5 Press **Stop/Exit**.

### (For MFC-640CW)

1 Press **Menu/Set**, **6**, **6**.

2 Press **Mono Start** or **Colour Start**.

3 Press **Stop/Exit**.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `Print Reports`.
   Press **OK**.
3. Press ▲ or ▼ to select `Network Config`.
   Press **OK**.
4. Press **Mono Start** or **Colour Start**.

## Restoring the network settings to factory default

If you wish to reset the print server back to its default factory settings (resetting all information such as the password and IP address information), please follow these steps:

**Note**

This function restores all wired and wireless network settings to the factory default.

### (For DCP-340CW)

1. Make sure the machine is not operating, then disconnect all the cables from the machine (except power cable).
2. Press **Menu**.
3. Press ▲ or ▼ to select `3.LAN`.
   Press **Set**.
4. Press ▲ or ▼ to select `0.Factory Reset`.
   Press **Set**.
5. Press ▲ to select `Reset`.
6. Press ▲ again to select `Yes`.
7. The machine will re-start, re-connect cables once this is complete.

### (For MFC-640CW)

1. Make sure the machine is not operating, then disconnect all the cables from the machine (except power cable).
2. Press **Menu/Set**, **5**, **0**.
3. Press **1** to select `1.Reset`.
4. Press **1** to select `1.Yes`.
5. The machine will re-start, re-connect cables once this is complete.

### (For MFC-820CW)

1. Press **Menu**.
2. Press ▲ or ▼ to select `LAN`.
   Press **OK**.
3. Press ▲ or ▼ to select `Factory Reset`.
   Press **OK**.
4. Press **1** for `Factory Reset`.
5. Press **1** for `Reboot`.

# 5 Network printing from Windows®: basic TCP/IP Peer-to-Peer printing

## Overview



If you are a Windows® user and want to print using the TCP/IP protocol in a Peer-to-Peer environment, please follow the instructions in this chapter. This chapter explains how to install the network software and the printer driver which you will need to be able to use as a network printer.

**Note**

- You must configure the IP address on your machine before you proceed with this chapter. If you have not configured the IP address, see *Chapter 2* first.
- Verify the host computer and print server are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- Before installation, if you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.
- If you are connecting to a Network Print Queue or Share (printing only), see *Installation when using a Network Print Queue or Share (printer driver only)* on page A-8 for installation details.

## For Windows® 2000/XP users

By default, Windows® 2000/XP systems install the necessary print software to enable you to print. This section describes the most commonly used configuration, Standard TCP/IP Port printing.

If you have already installed the printer driver, jump to *Printer driver already installed* on page 5-2.

### Configuring the standard TCP/IP port

#### Printer driver not yet installed

1. For Windows® 2000: Go to the **Start** button, select **Settings** and then **Printers**.
   For Windows® XP: Go to the **Start** button and select **Printers and Faxes**.
2. For Windows® 2000: Double click the **Add Printer** icon to get the **Add Printer Wizard**.
   For Windows® XP: Double click **Add a printer** to get the **Add Printer Wizard**.
3. Click **Next** when you see the **Welcome to the Add Printer Wizard** screen.
4. Select **Local printer** and deselect the **Automatically detect and install my Plug and Play printer** option.
5. Click **Next**.

6 You must now select the correct Network printing port. Select **Create a new port** and select **Standard TCP/IP Port** port from the pull-down window.

7 Click **Next**.

8 The **Add Standard TCP/IP Printer Port Wizard** will now appear. Click **Next**.

9 Enter the IP address, or the print server name you wish to configure. The Wizard will automatically enter the Port name information for you.

10 Click **Next**.

11 Windows® 2000/XP will now contact the printer that you specified. If you did not specify the correct IP address or name then you will receive an error message.

12 Click **Finish** to complete the Wizard.

13 Now that you have configured the port, you must specify which printer driver you wish to use. Select the appropriate driver from the list of supported printers. If you are using a driver supplied with the machine on CD-ROM then select the **Have Disk** option to browse to the CD-ROM.

14 For example, select the “X:\your language\W2K\Addprt” folder (where X is your drive letter). Click **Open**, and then **OK**. Select your printer, then click **Next**.

15 Specify a name and select **Yes** or **No** if you want this driver to be default printer, and then click **Next**.

16 Now specify if you wish to share the printer, enter the share name and click **Next**.

17 Select **Yes** and **Next** to print a test page.

18 Continue through the Wizard clicking **Finish** when complete.

### Printer driver already installed

If you have already installed the printer driver and wish to configure it for network printing, follow these steps:

1 Select the printer driver you wish to configure.

2 Select **File** and then **Properties**.

3 Click the **Ports** tab of the driver and click **Add Port**.

4 Select the port that you wish to use. Typically this would be **Standard TCP/IP Port**. Then click the **New Port...** button.

5 The **Standard TCP/IP Port Wizard** will start. Follow steps 8 to 12 of *Printer driver not yet installed* on page 5-1.

6 Close **Add Port** and **Properties** dialog box.



# For Windows® 98/98SE/Me users

Windows® 98/98SE/Me users can send print job using Brother Peer-to-Peer Print software provided on the CD-ROM which we have supplied with the machine.

## Installing the Brother Peer-to-Peer software

**Note**

If you already installed the driver from the supplied CD-ROM with the machine Installer and you selected **Brother Peer-to-Peer Network Printer** during the installation then you do not need to install the network software and the printer driver again.

1 Start the CD-ROM installation menu program according to the Quick Setup Guide.

2 Select the model name and your language (if necessary), and then click **Install Optional Applications**.

3 Click **Printer Driver (Only)**.

4 Click **Next** in response to the Welcome message. Follow the on-screen instructions.

5 Select **Standard Installation** and click **Next**.

6 Select **Brother Peer-to-Peer Network Printer**, and then click **Next**.

7 For LPR users:
Select **Search the network for devices and choose from a list of discovered devices (Recommended)**. Or enter your printer's IP address or its node name. Click **Next**.

For NetBIOS users:
Select **Search the network for devices and choose from a list of discovered devices (Recommended)**. Click **Next**.

**Note**

The printer's IP address and the node name are printed on the Network Configuration List. To learn how to print the Network Configuration List, see *Printing the Network Configuration List* on page 4-27.

8 For LPR users:
Select your printer and **LPR (Recommended)**, and then click **Next**.

For NetBIOS user:
Select your printer and **NetBIOS**, and then click **Next**.

9 Click **Finish**.

10 Click **OK**. When prompted you must re-boot your computer.

## Associating to the printer

You must now create a printer on your Windows® system using the standard Windows® printer setup procedure.

1 To do this, go the **Start** button, select **Settings** and then **Printers**.

2 Double click the **Add Printer** icon to get the **Add Printer Wizard**.

3 Click **Next** when you get the **Add Printer Wizard** window.

4 Select **Local Printer** when you are asked how the printers are connected to your computer, and then click **Next**.

5 Select the desired printer model. If the correct model is not displayed, click the **Have Disk** option and insert the CD-ROM supplied with your machine.

6 If you have selected a printer driver that is already being used, you have the option of either keeping the existing driver (recommended) or replacing it. Select the desired option and click **Next**.

7 Select the Brother LPR port (the port name you assigned in step 6 of the *Installing the Brother Peer-to-Peer software* on page 5-3) and click **Next**.

8 Enter any desired name for the Brother printer. For example, you could call the printer “Networked Brother Printer”. Select **Yes** or **No** if you want this driver to be default printer, and then click **Next**.

9 Windows® will now ask you if you wish to print out a test page, select **Yes** and then select **Finish**. You have now finished installing the Peer-to-Peer Print (LPR) software.

## Adding a second Brother LPR port

You do not re-run the install program to add a new Brother LPR port. Instead, go to the **Start** button, select **Settings**, and open the **Printers** window. Click the icon of the printer that you wish to configure, select **File** from the menu bar, and then **Properties**. Click the **Details** tab and then the **Add Port** button. In the **Add Port** dialog, select the **Other** radio button and then highlight **Brother LPR port**. Click **OK** and enter the port name. The default port name is BLP1. If you have already used this name, you will get an error message if you try to use it again, in which case use BLP2, etc... Once you have specified the port name, click **OK**. You will then see the **Port Properties** dialog.

Enter the IP address of the printer that you wish to print to and click **OK**. You should now see the port that you have just created in the **Print to the following port** setting of the printer driver.

# Other sources of information

See *Chapter 2* of this User's Guide to learn how to configure the IP address of the printer.

# 6 Network printing from Macintosh®

## Overview



This chapter explains how to print from Macintosh® on a Network using the Simple Network Configuration capabilities on Mac OS® X 10.2.4 or greater. For more information on how to configure the Brother ink driver on a Network for Mac OS® 9.1 to 9.2, see the Quick Setup Guide included with the machine.

For updated information on printing from a Macintosh®, visit the Brother Solutions Center at: http://solutions.brother.com.

## Printing from a Macintosh® using the Simple Network Configuration capabilities of Mac OS® X

With the release of Mac OS® X 10.2, Apple® introduced Simple Network Configuration capabilities.

The Simple Network Configuration capabilities of Mac OS® X lets you create an instant network of computers and smart devices by connecting them to each other. The smart devices automatically configure themselves to be compatible with your network.

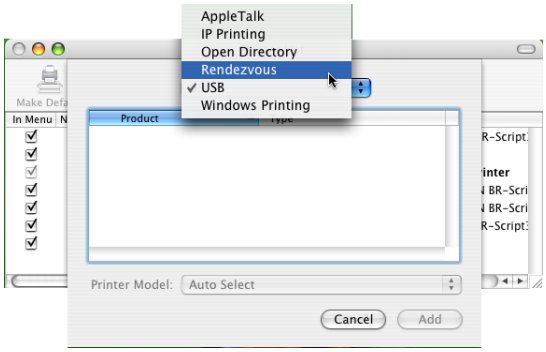
You do not need to manually configure any IP address or network strings within the printer as the printer will automatically configure itself.

Please note that you need to use Mac OS® X 10.2.4 or later version.

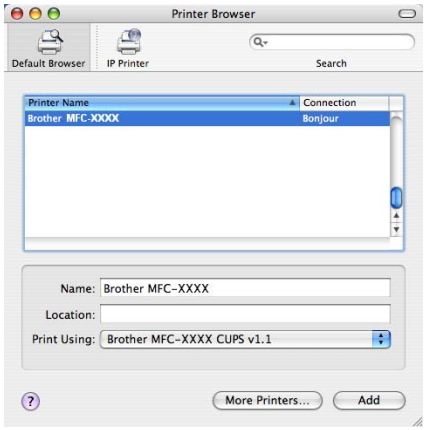
### How to select the print driver (Mac OS® X 10.2.4 or greater)

1. Turn the power of the machine ON.
2. From the **Go** menu, select **Applications**.
3. Open the **Utilities** folder.
4. Double click the **Printer Setup Utility** Icon. (Mac OS® X 10.2.x users, click the **Print Center** icon.)
5. Click **Add**.
   (For Mac OS® X 10.2.4 to 10.3) Go to Step 6.
   (For Mac OS® X 10.4) Go to Step 7.

**6** (For Mac OS® X 10.2.4 to 10.3)
Make the following selection.




**7** Select **Brother MFC-XXXX** or **Brother DCP-XXXX** (XXXX is your model name), and then click **Add**.




**8** Click the printer, then click **Make Default** to set the printer as the default printer. The printer is now ready to print.

# Changing the configuration using the Remote Setup

From a Macintosh®, the easiest way to change the printer or print server parameters is to use the Remote Setup application.

See *Using the Remote Setup to change the print server settings (for Windows® and Mac OS® X 10.2.4 or greater) (not available for DCP-340CW)* on page 2-6.

# Changing the configuration using the BRAdmin Light utility

The Brother BRAdmin Light utility is a Java application that is designed for Mac OS® X 10.2.4 or greater environment. BRAdmin Light allows you to change network settings and update firmware on Brother network ready machine. You can download the BRAdmin Light from the Brother Solutions Center at: http://solutions.brother.com.

Please note that you must install Runtime Environment 1.4.1 of the Java client software on your Macintosh®.

# Other sources of information

1. See *Chapter 2* of this User's Guide to learn how to configure the IP address of the printer.
2. Visit http://solutions.brother.com for more information on network printing.

# 7 Troubleshooting

## Overview



This chapter explains how to resolve typical network problems you may encounter when using the machine. If, after reading this chapter, you are unable to resolve your problem, please visit the Brother Solutions Center at: http://solutions.brother.com.

This chapter is divided into the following sections:

- General problems
- Network print software installation problems
- Printing problems
- Scanning and PC-FAX problems
- Protocol-specific troubleshooting
- Wireless network specific troubleshooting

## General problems

### CD-ROM is inserted, but does not start automatically

If your computer does not support Autorun, the menu will not start automatically after inserting the CD-ROM. In this case, execute **setup.exe** in the root directory of the CD-ROM.

### How to reset the Brother print server to factory default

You can reset the print server back to its default factory settings (resetting all information such as the password and IP address information). See *Restoring the network settings to factory default* on page 4-28.

### My computer cannot find the machine/print server<br>My machine/print server does not appear in the window of Remote Setup or BRAdmin Professional (BRAdmin Light)

<For Windows®>

Firewall setting on your PC may be rejecting the necessary network connection. For more information, see *Check the following:* on page 7-4.

<For Macintosh®>

Re-select your machine in the DeviceSelector application located in Macintosh HD/Library/Printers/Brother/Utilities or from the model pull-down list of ControlCenter2.

# Network print software installation problems



### The Brother print server is not found during setup of the network print software installation or from the printer driver of the Brother machine in Windows®.

### The Brother print server is not found using the Simple Network Configuration capabilities of Mac OS® X.

(For a network with an Ethernet cable connection)
Make sure you have completed the IP address setting of the Brother print server according to *Chapter 2* of this User's Guide before installing the network print software or printer driver.

(For a wireless network)
Make sure you have completed the IP address setting and wireless network settings of the Brother print server according to *Chapter 3* of this User's Guide before installing the network print software or printer driver.

Check the following:

1. Make sure that the machine is powered on, is on-line and ready to print.

2. Check to see if the LCD displays `LAN Active` after being connected to the network.

   The LCD displays `LAN Active`: The print server is connected to the network.

   The LCD does not display `LAN Active`: The print server is not connected to the network.

3. Print the Network Configuration List and check if the settings such as IP address settings are correct for your network. The problem may be the result of mismatched or duplicate IP address. Verify that the IP address is correctly loaded into the print server. And make sure that no other nodes on the network have this IP address. For information on how to print the Network Configuration List, see *Printing the Network Configuration List* on page 4-27.

4. Verify that the print server is on your network as follows:

**For Windows®**

Try pinging the print server from the host operating system command prompt with the command:

```
ping ipaddress
```

Where `ipaddress` is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).

### For Macintosh®

#### For Mac OS® 9.1 to 9.2 (for the wired network connection only)

(1) From the **Apple** menu, open the **Chooser**.

(2) Click the **Brother Ink (IP)** icon, and make sure that your print server name appears in the right frame. If it is visible, then the connection is good. Otherwise, go to Step 5.

#### For Mac OS® X 10.2.4 or greater

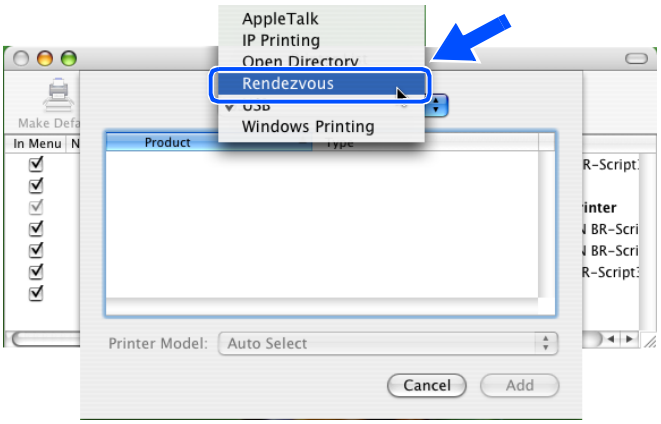
(1) From the **Go** menu, select **Applications**.

(2) Open the **Utilities** folder.

(3) Double click the **Printer Setup Utility** icon.

(4) Click **Add**.
(For Mac OS X 10.2.4 to 10.3) Go to (5).
(For Mac OS X 10.4) Go to (6).

(5) (For Mac OS X 10.2.4 to 10.3) Make the following selection.




(6) Make sure that your print server appears. If it is visible, then the connection is good. Otherwise, go to Step 5.

**5** If you have tried 1 to 4 above and it does not work, then reset the print server back to the default factory settings and try from the initial setup again. For information how to reset to the default factory settings, see *Restoring the network settings to factory default* on page 4-28.

**6** Check the following:

**For Windows®**

If the installation failed, the Firewall on your computer may be blocking the necessary network connection to the machine. In this case, you will need to disable the Firewall on your computer and re-install the drivers.

<Windows® XP SP2 users>

(1) Click the **Start** button, **Settings**, and then **Control Panel**.

(2) Double click **Windows Firewall**.

(3) Click the **General** tab. Verify that **Off (not recommended)** is selected.

(4) Click **OK**.

<Windows® XP SP1 users>

(1) Locate the “Windows” key on your keyboard. This is the key with the Windows logo on it.



(2) Press the “Windows” key plus the “E” key to open **My Computer**.

(3) On the left, right click **My Network Places**, click **Properties**, then right click **Local Area Connection** and click **Properties**.

(4) Click the **Advanced** tab. Under **Internet Connection Firewall**, verify that the box next to **Protect my computer...** is unchecked. If the box is selected, click the box to remove the check. Then, click **OK**.

(5) Once your firewall is disabled, try reinstalling the Brother software package. For instructions on how to install from the CD-ROM, use the Quick Setup Guide we have provided with the machine.

(6) If the installation completed successfully, the Firewall on your computer was rejecting the necessary network connection. In this case, you will need to disable the Firewall on your computer whenever you install the network drivers.

**Note**

After the Brother software package is installed, enable again your Firewall. For instructions on how to re-enable your Firewall software, refer to your User’s Guide or contact the Firewall software manufacturer.

**For Macintosh® (for a wireless network)**

Select again your machine in the DeviceSelector application located in Macintosh HD/Library/Printers/Brother/Utilities or from the ControlCenter2.

7 Move your PC closer to the Brother machine and try again.

8 Reset the print server back to its default factory settings and try again. For the information how to reset to the factory default settings, see *Restoring the network settings to factory default* on page 4-28.



# Printing problems

## Print job is not printed

Make sure the status and configuration of the print server. Check following:

1 Make sure that the machine is powered on, is on-line and ready to print.

2 Print the Network Configuration List of the machine and check if the settings such as IP address settings are correct for your network. The problem may be the result of mismatched or duplicate IP address. Verify that the IP address is correctly loaded into the print server. And make sure that no other nodes on the network have this IP address.

3 Verify that the print server is on your network as follows:

**For Windows®**

(1) Try pinging the print server from the host operating system command prompt with the command:

```
ping ipaddress
```

Where `ipaddress` is the print server IP address (note that in some instances it can take up to two minutes for the print server to load its IP address after setting the IP address).

(2) If a successful response is received, then proceed to *Windows® 98/98SE/Me Peer-to-Peer print (LPR) troubleshooting*. Otherwise, proceed to Step 4.

### For Macintosh®

#### For Mac OS® 9.1 to 9.2

(1) From the **Apple** menu, open the **Chooser**.

(2) Click the **Brother Ink (IP)** icon, and make sure that your print server name appears in the right frame. If it is visible, then the connection is good. Otherwise, go to Step 4.

#### For Mac OS® X 10.2.4 or greater

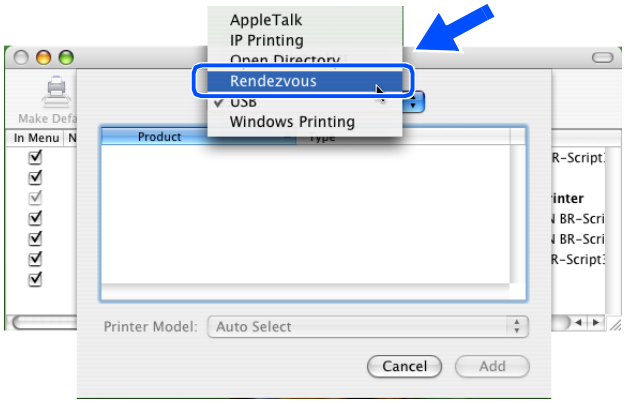
(1) From the **Go** menu, select **Applications**.

(2) Open the **Utilities** folder.

(3) Double click the **Printer Setup Utility** icon.

(4) Click **Add**.
(For Mac OS X 10.2.4 to 10.3) Go to (5).
(For Mac OS X 10.4) Go to (6).

(5) (For Mac OS X 10.2.4 to 10.3) Make the following selection.




(6) Make sure that your print server appears. If it is visible, then the connection is good. Otherwise, go to Step 5.

***4*** Reset the print server back to the default factory settings and try from the initial setup again. For information how to reset to the default factory settings, see *Restoring the network settings to factory default* on page 4-28

## Error during printing

If you try to print while other users are printing large amounts of data (e.g. many pages or color pages with high resolution), the printer is unable to accept your print job until the ongoing printing is finished. If the waiting time of your print job exceeds a certain limit, a time out situation occurs, which causes the error message. In such situations, execute the print job again after the other jobs are completed.

# Scanning and PC-FAX problems

### The network scanning feature does not work in Windows®

### The network PC-FAX feature does not work in Windows®

Firewall setting on your PC may be rejecting the necessary network connection. Follow the instructions below to configure the Firewall. if you are using a personal Firewall software, see the User's Guide for your software or contact the software manufacturer.

<Windows® XP SP2 users>

1. Click the **Start** button, **Settings**, and then **Control Panel**.
2. Double click **Windows Firewall**.
3. Click the **General** tab. Verify that **On** is selected.
4. Click the **Exceptions** tab and **Add port** button.
5. Enter any name, port number (54295 for network scanning and 54926 for PC-FAX receiving), select **UDP** and click **OK**.
6. Make sure if the new setting is added and is checked, and then click **OK**.

# Protocol-specific troubleshooting

## Windows® 98/98SE/Me Peer-to-Peer print (LPR) troubleshooting

If you are having trouble printing on a Windows® 98/98SE/Me Peer-to-Peer network (LPR method), check the following:

1. Make sure that the Brother LPR Port driver is correctly installed and configured according to the Windows® 98/98SE/Me Peer-to-Peer chapter. See *For Windows® 98/98SE/Me users* on page 5-3.
2. Try to turn the **Byte Count** on in the **Configure port** area of printer driver properties.

You may find that during the installation of BLP software, the screen that prompts you for a Port name is not displayed. This may happen on some Windows® 98/98SE/Me computers. Press the ALT and TAB keys to make it appear.

# Wireless network troubleshooting

## Wireless setup problems



### The Brother print server is not found during setup by the Wireless Device Setup Wizard.

1. Make sure that the machine is powered on, is on-line and ready to print.
2. Move your computer closer to the Brother machine and try again.
3. Reset the print server back to its default factory settings and try again. For the information how to reset to the factory default settings, see *Restoring the network settings to factory default* on page 4-28.

### Why do I have to change my machine's network setting to "Wired LAN" during setup although I am trying to setup Wireless LAN?

If you are using Windows® 98/98SE/Me/2000, Mac OS® X 10.2.4 or greater or your computer is connected to the wireless network using a network cable, it is recommended you temporarily connect the machine to your access point, hub or router using a network cable. You will also need to change your machine's network setting to wired LAN temporarily. Your machine's network setting will be changed to wireless LAN automatically or during the course of the setup.

For Windows®:

*Installation using a wireless computer in Ad-hoc Mode* on page 8-31
*Installation using a wired computer in Infrastructure mode* on page 8-14
*Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3

For Macintosh®:

*Installation using a wireless computer in Ad-hoc Mode for Mac OS® X 10.2.4 or greater* on page 9-25
*Installation using a wired computer in Infrastructure mode for Mac OS® X 10.2.4 or greater* on page 9-14

*Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3

## Wireless connection problem

### The wireless network connection is sometimes disabled.



The wireless network connection status is affected by the environment where the Brother machine and other wireless devices are located. The following conditions may cause connection problems:

- A concrete or metal framed wall is located between the Brother machine and the access point.
- Electric appliances such as televisions, computer appliances, microwave ovens, intercoms, mobile/cellular phones and the battery chargers and AC power adapters are installed close to your network.
- A broadcast station or high-tension wire is located close to your network.
- A nearby fluorescent light is being switched ON or OFF.

# 8 Wireless installation for Windows®

## Installation using a wireless computer in Infrastructure mode



### For Windows® 98/98SE/Me/2000 Professional/XP

#### Important

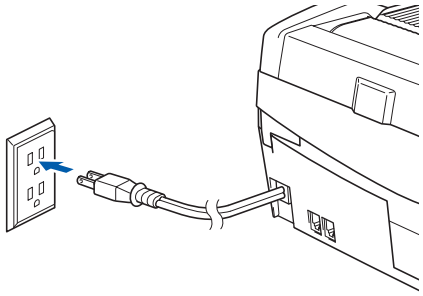
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

*1* Turn on the machine by plugging in the power cord.



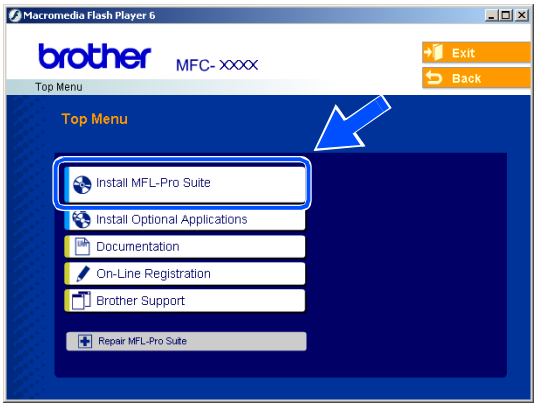
*2* Turn on your computer.
(For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)
Close any applications running before installing the MFL-Pro Suite.

**Note**

Before installation, if you are using personal firewall software, disable it. Once you are sure that you can print after the installation, restart your personal firewall software.

*3* Put the supplied CD-ROM into your CD-ROM drive. If the model name screen appears, choose your machine. If the language screen appears, choose your language.

**4** The CD-ROM main menu will appear. Click Install MFL-Pro Suite.




**Note**

- If this window does not appear, use Windows® Explorer to run the setup.exe program from the root folder of the Brother CD-ROM.
- **If you are using Windows® 2000 Professional and have not installed Service Pack 3 (SP3) or greater:** To access the PhotoCapture Center™ features from your computer you may have to install a Windows® 2000 update first.

  The Windows® 2000 update is included with the MFL-Pro Suite installer. To install the update, follow the steps below:

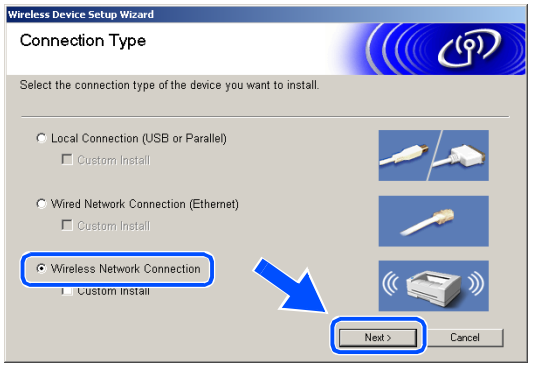
  1 Click **OK** to start installation of the Windows® update.

  2 When instructed, click **OK** to restart your computer.

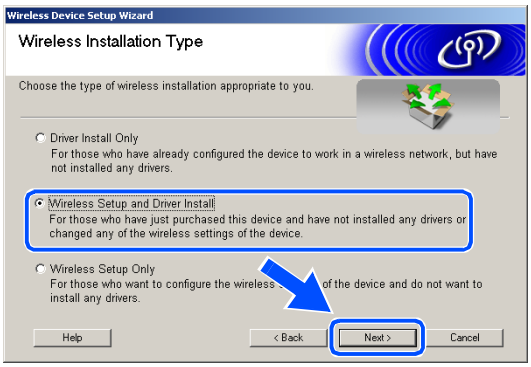
  3 After the computer restarts, the installation of MFL-Pro Suite will automatically continue.

  If the installation does not continue automatically, open the main menu again by ejecting then reinserting the CD-ROM disc or double-click the **setup.exe** program from the root folder, and continue from *Step **4*** to install the MFL-Pro Suite.

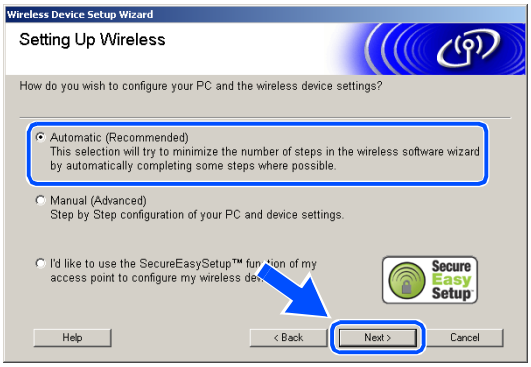
**5** Choose **Wireless Network Connection**, and then click **Next**.



**6** Choose **Wireless Setup and Driver Install**, and then click **Next**.



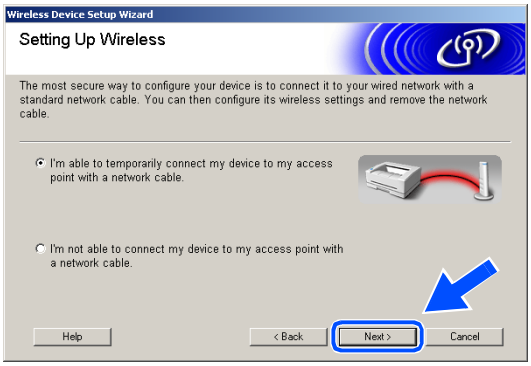

**7** Choose **Automatic (Recommended)** and then click **Next**.



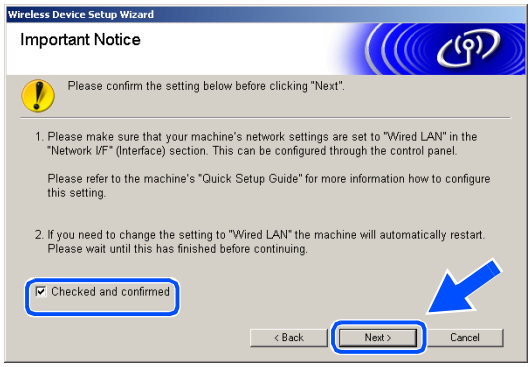

**8** For configuration, it is recommended that you temporarily connect your Brother wireless device directly to a free port on your access point, hub or router using a network cable.

If you can temporarily connect with a network cable:
Choose **I'm able to temporarily connect my device to my access point with a network cable** and then click **Next**.
*Go to step **9**.*

If you do not have a network cable or cannot temporarily connect the Brother wireless device to your access point:
Choose **I'm not able to connect my device to my access point with a network cable** and then click **Next**.
*Go to step **10**.*



**9** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `Wired LAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `Wired LAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `Wired LAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

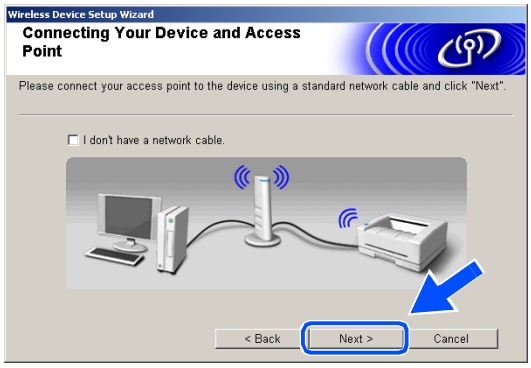
If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

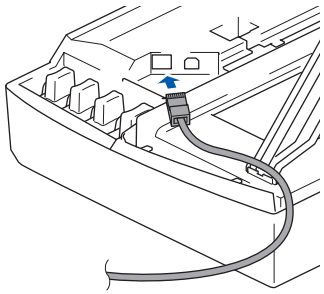
**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

For configuration, you must temporarily connect your Brother wireless device directly to a free port on your access point, hub or router using a network cable.

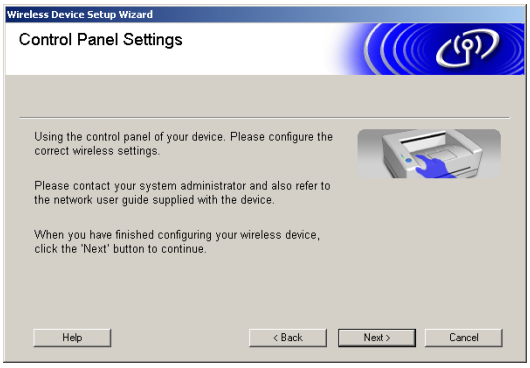
When the following screen appears, open the scanner cover to its open position. Insert the network cable to the access point and then to the machine. You will find the LAN socket above and to the left of the ink cartridge slots, as shown. Click **Next** and *go to step **13***.



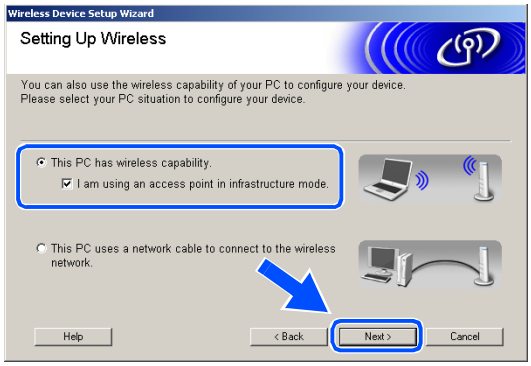


**Note**

If you do not have a network cable, check **I don't have a network cable** and click **Next**. You will need to configure the wireless settings from the control panel. Follow the onscreen instruction to complete the setup. When the setup is finished, *go to step* ***22*** for driver installation.



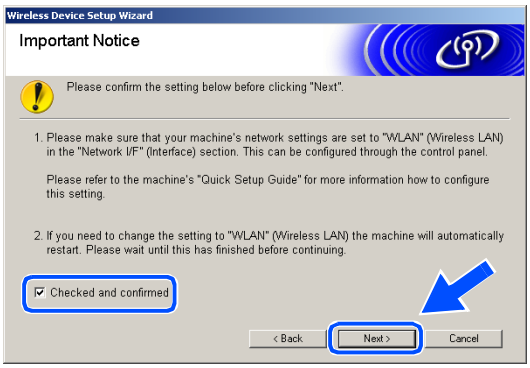

***10*** (Continued from *Step* ***8***) If you choose **This PC has wireless capability.**, check **I am using an access point in infrastructure mode**, and then click **Next**.



If you choose **This PC uses a network cable to connect to the wireless network.**, you must configure the wireless settings from the control panel. Click **Next** and follow the on-screen instructions to complete the setup. See *Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3. When finished, go to the driver installation in *Step* **22**.




**11** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `WLAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `WLAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

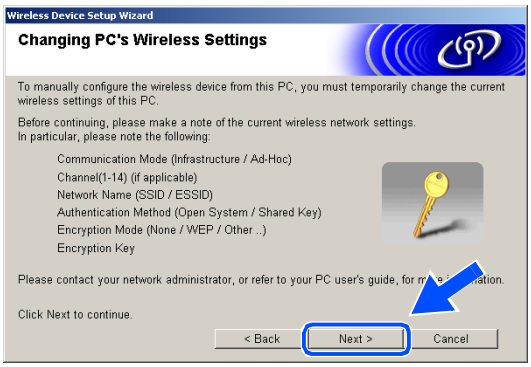
For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `WLAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screeen and click **Next**.

If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

**Note**

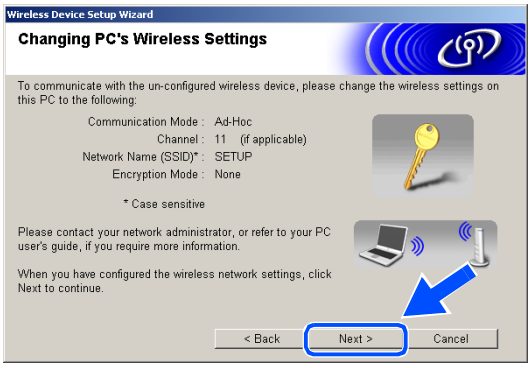
It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

You need to temporarily change your PC's wireless settings. Please follow the on-screen instructions. Please make sure you take notes on all the settings such as SSID or channel of your PC. You will need them to return your PC back to its original wireless settings.




| Item | Record the current wireless computer settings |
|---|---|
| Communication mode: (Infrastructure/Ad-hoc) | |
| Channel: (1-14) | |
| Network name (SSID/ESSID) | |
| Authentication method (Open system/Shared key) | |
| Encryption: (None/WEP/Other) | |
| Encryption key: | |

***12*** To communicate with the un-configured wireless machine, temporarily change the wireless settings on your PC to match machine's default settings shown on this screen. Click **Next**.



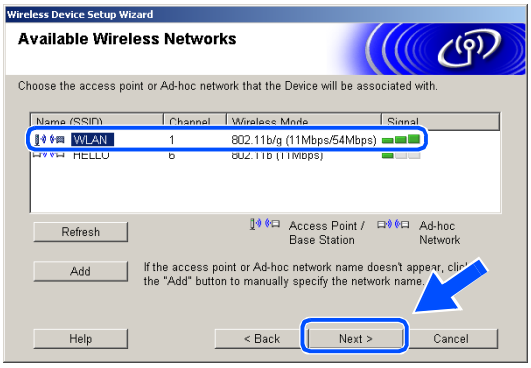
**13** If more than one wireless machine is available on the network, the following list appears. If the list is blank, check if the access point and the machine are powered on, and then click **Refresh**. Choose the machine you wish to configure, and click **Next**.




**Note**

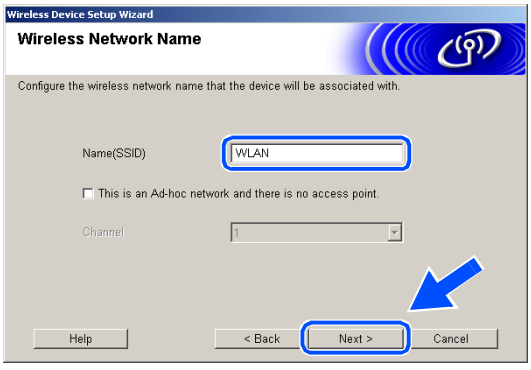
The Default Node name of the NC-xxxx (where “xxxx” is your model name) is “BRW_xxxxxx” or “BRN_xxxxxx” (where “xxxxxx” is the last six digits of Ethernet address).

**14** The wizard will search for wireless networks available from your machine. If more than one wireless network is available, the following list appears. Choose the access point you wish to associate the machine with, and then click **Next**.




**Note**

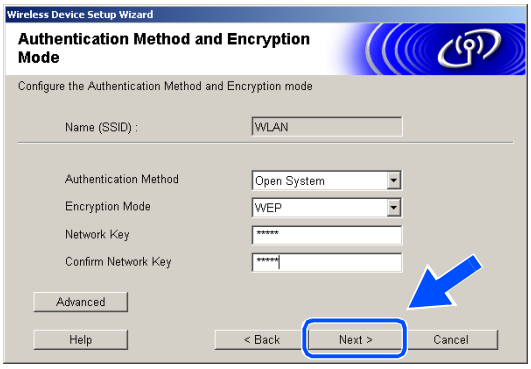
- If your target access point does not appear on the list, you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)** and the **Channel** number.
- “SETUP” is the default SSID of the machine. Do not choose this SSID.
- If the list is blank, check that the access point has power, and then see if the machine and the access point are within range for wireless communication. Then, click **Refresh**.



**15** If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click **OK** and *go to step* ***17***.



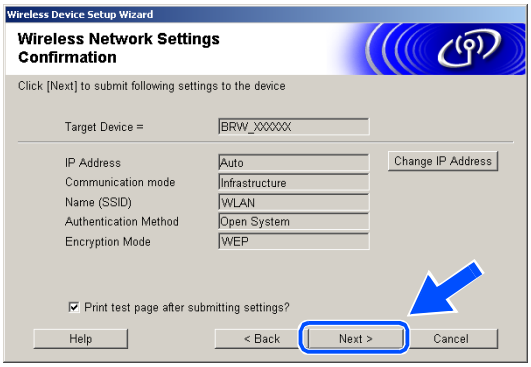

**16** If your network is configured for Authentication and Encryption, the following screen will appear. When configuring your Brother wireless machine, you must ensure that it is configured to match the Authentication and Encryption settings of your existing wireless network. Choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.




**Note**

- If you want to set more than one WEP key, click **Advanced**.
- If you do not know the Authentication or Encryption settings for network, contact your network administrator.

**17** Click **Next**. The settings will be sent to your machine. The settings will remain unchanged if you click **Cancel**.

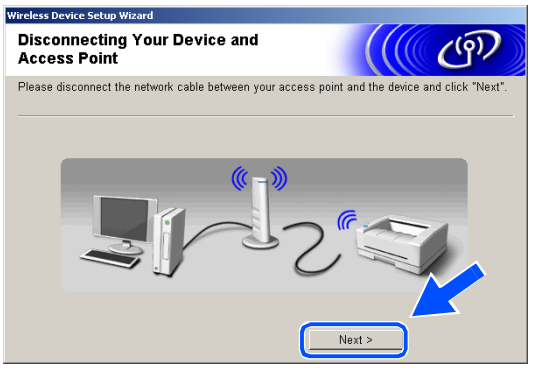



**Note**

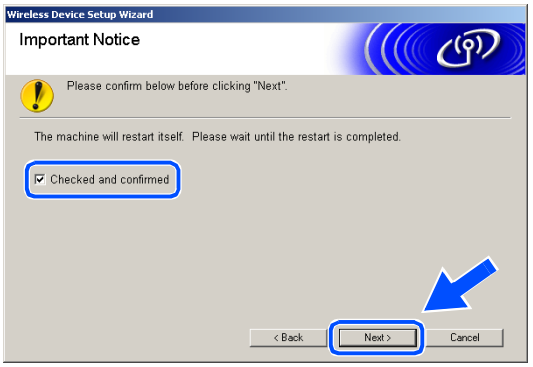
- If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network. After making your selection, click **Next** and the Wizard will search for available wireless networks.
- The control panel settings will be automatically changed to `WLAN` when the wireless settings are sent to your machine.

**18** If you chose to use a network cable in *Step **8***, *go to step **19***.
If you chose not to use a network cable in *Step **8***, *go to step **21***.

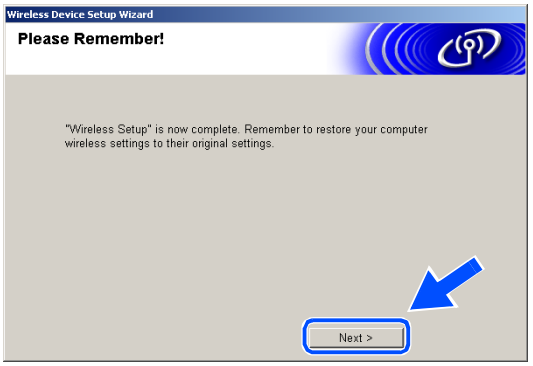
**19** Disconnect the network cable between your access point (hub or router) and the machine, and click **Next**.




**20** The machine will restart automatically. After the machine is restarted, check **Checked and confirmed.**, and then click **Next**. Wait until the restart is completed. *Go to step **22***.



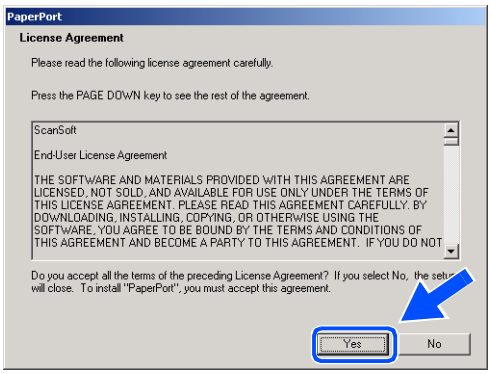

**21** Using the information you recorded in *Step **11***, return the wireless settings of your computer back to their original settings. Click **Next**.




OK!

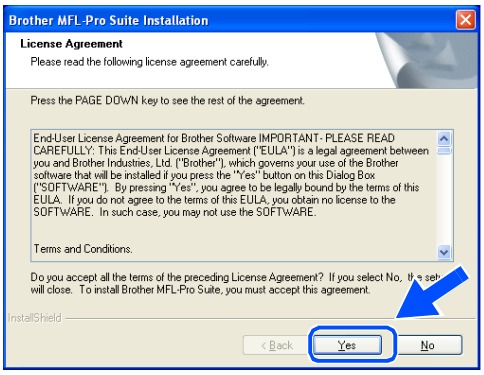
**You have completed the wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *Step 6*, *go to step 22*.**

**22** The driver installation starts. After reading and accepting the ScanSoft® PaperPort® 9.0SE License Agreement, click **Yes**.
(Not available if you chose **Driver Install Only** in *Step* ***6***.)




**23** The installation of PaperPort® 9.0SE will automatically start and is followed by the installation of MFL-Pro Suite.

**24** When the Brother MFL-Pro Suite Software License Agreement window appears, click **Yes** if you agree to the Software License Agreement.

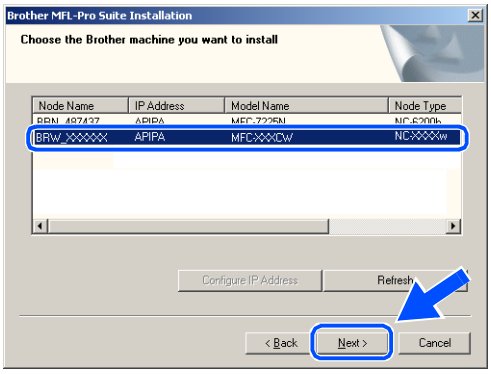



**25** The installation of the Brother drivers will automatically start. The installation screens appear one after another. Please wait for a while.

**Improper Setup**

- **DO NOT try to cancel any of the screens during this installation.**
- **If your wireless settings fail, and error message will appear during the installation of MFL-Pro Suite and the installation will be terminated. If you encounter this failure, please *go to step 4* and setup the wireless connection again.**

**26** If the machine is configured for your network, choose the machine from the list, and then click **Next**.



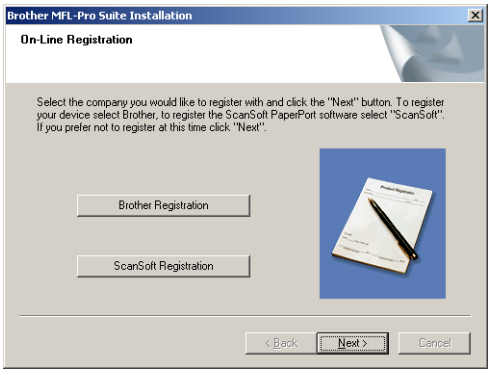

**Note**

This window will not appear if there is only one machine connected on the network as it will be chosen automatically.

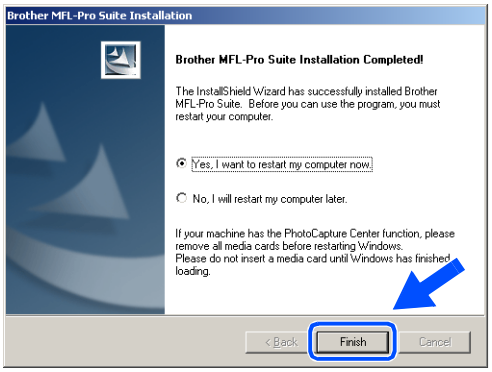
**27** If the machine is not yet configured for use on your network, the following screen appears.
Click **OK**.
The **Configure IP Address** windows will appear. Enter the proper IP address information for your network by following the on-screen instructions.




**28** When the Brother and ScanSoft® on-line Registration screen is displayed, make your selection and follow the on-screen instructions.




**29** Click Finish to restart your computer. (For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)



**Note**

After restarting the computer, the Installation Diagnostics will run automatically. If the installation is unsuccessful, the installation results window will be shown. If the Diagnostics shows a failure, please follow the on-screen instructions or read on-line help and FAQ's in Start/All Programs/Brother/MFL-Pro Suite MFC-820CW (or DCP-340CW or MFC-640CW).






**The MFL-Pro Suite including Brother Network Printer driver, Network Scanner driver and Network PhotoCapture Center™ have been installed and the installation is now complete.**

# Installation using a wired computer in Infrastructure mode

## For Windows® 98/98SE/Me/2000 Professional/XP



### Important

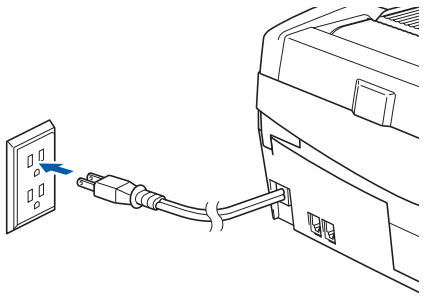
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

*1* Turn on the machine by plugging in the power cord.



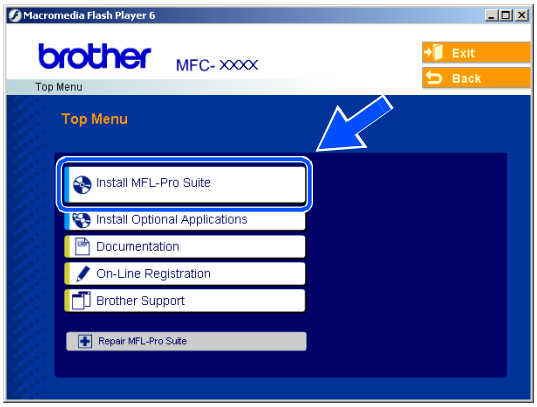
*2* Turn on your computer.
(For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)
Close any applications running before installing the MFL-Pro Suite.

**Note**

Before installation, if you are using personal firewall software, disable it. Once you are sure that you can print after the installation, restart your personal firewall software.

*3* Put the supplied CD-ROM into your CD-ROM drive. If the model name screen appears, choose your machine. If the language screen appears, choose your language.

**4** The CD-ROM main menu will appear. Click Install MFL-Pro Suite.




**Note**

- If this window does not appear, use Windows® Explorer to run the setup.exe program from the root folder of the Brother CD-ROM.
- **If you are using Windows® 2000 Professional and have not installed Service Pack 3 (SP3) or greater:** To access the PhotoCapture Center™ features from your computer you may have to install a Windows® 2000 update first.

  The Windows® 2000 update is included with the MFL-Pro Suite installer. To install the update, follow the steps below:

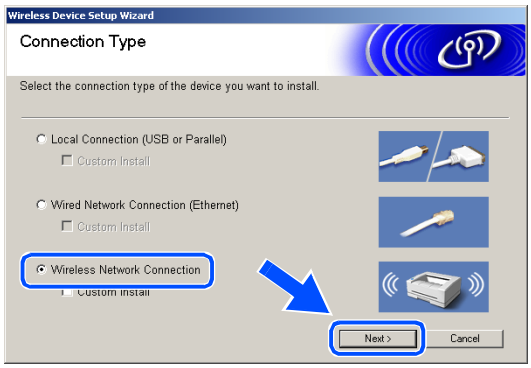
  1 Click **OK** to start installation of the Windows® update.

  2 When instructed, click **OK** to restart your computer.

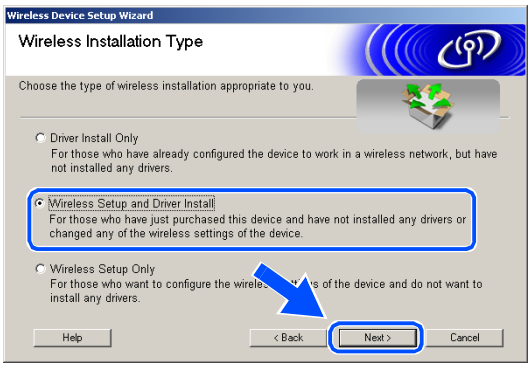
  3 After the computer restarts, the installation of MFL-Pro Suite will automatically continue.

  If the installation does not continue automatically, open the main menu again by ejecting then reinserting the CD-ROM disc or double-click the **setup.exe** program from the root folder, and continue from *Step* ***4*** to install the MFL-Pro Suite.

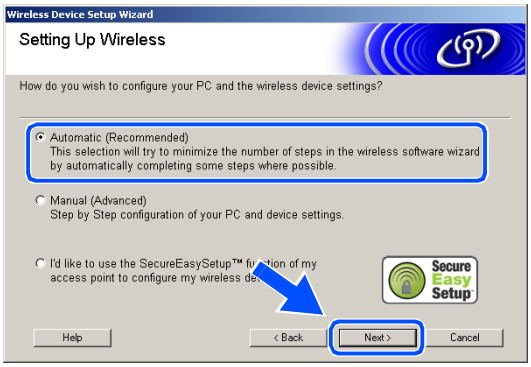
**5** Choose **Wireless Network Connection**, and then click **Next**.



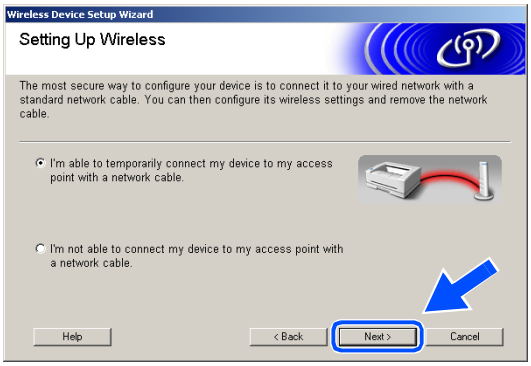
**6** Choose **Wireless Setup and Driver Install**, and then click **Next**.




**7** Choose **Automatic (Recommended)** and then click **Next**.



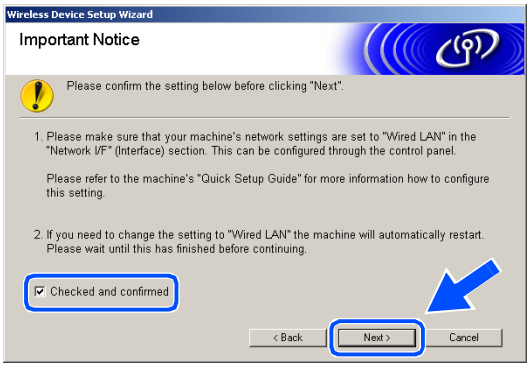

**8** For configuration, it is recommended that you temporarily connect your Brother wireless device directly to a free port on your access point, hub or router using a network cable.




If you can temporarily connect with a network cable:
Choose **I'm able to temporarily connect my device to my access point with a network cable** and then click **Next**.
*Go to step **9**.*

If you do not have a network cable or cannot temporarily connect the Brother wireless device to your access point:
Choose **I'm not able to connect my device to my access point with a network cable** and then click **Next**.
*Go to step **10**.*

**9** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `Wired LAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `Wired LAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `Wired LAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

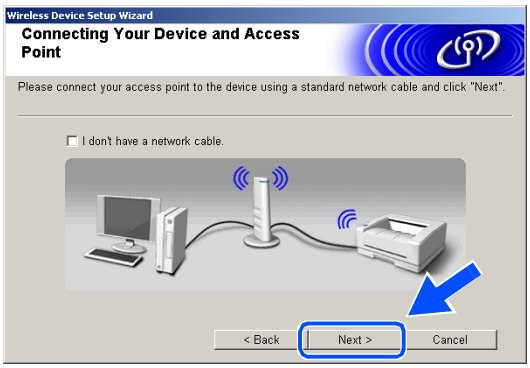
If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

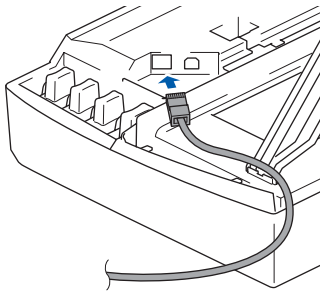
**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

For configuration, you must temporarily connect your Brother wireless device directly to a free port on your access point, hub or router using a network cable.

When the following screen appears, open the scanner cover to its open position. Insert the network cable to the access point and then to the machine. You will find the LAN socket above and to the left of the ink cartridge slots, as shown. Click **Next** and *go to step **12***.



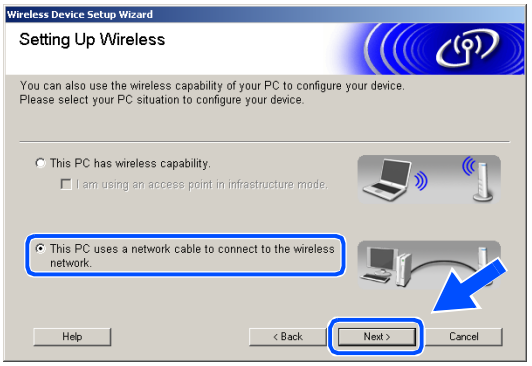


**Note**

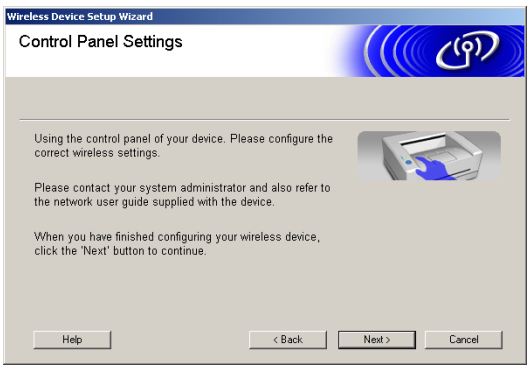
If you do not have a network cable, check **I don't have a network cable** and click **Next**. You will need to configure the wireless settings from the control panel. Follow the onscreen instruction to complete the setup. When the setup is finished, *go to step* ***19*** for driver installation.




***10*** (Continued from *Step* ***8***) Choose **This PC has a network cable to connect to the wireless network.**, and then click **Next**.




***11*** Follow the on-screen instructions to complete the setup by the control panel. See *Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3. When finished, go to the driver installation in *Step* ***19***.



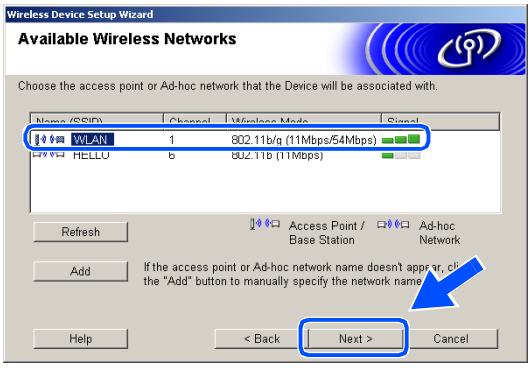
**12** If more than one wireless machine is available on the network, the following list appears. If the list is blank, check if the access point and the machine are powered on, and then click **Refresh**. Choose the machine you wish to configure, and click **Next**.




**Note**

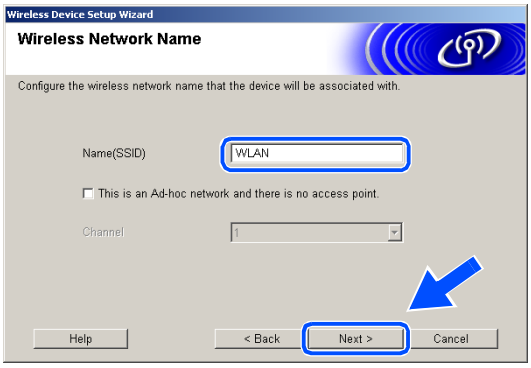
The Default Node name of the NC-xxxx (where “xxxx” is your model name) is “BRW_xxxxxx” or “BRN_xxxxxx (where “xxxxxx” is the last six digits of Ethernet address).

**13** The wizard will search for wireless networks available from your machine. If more than one wireless network is available, the following list appears. Choose the access point you wish to associate the machine with, and then click **Next**.




**Note**

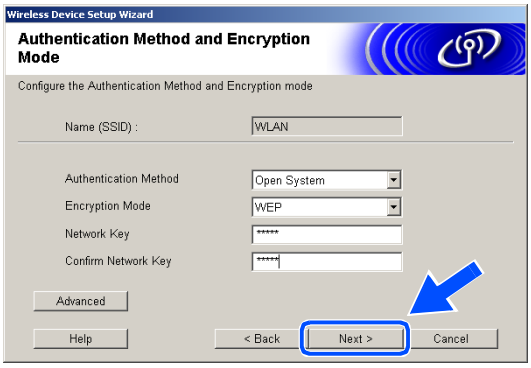
- If your target access point does not appear on the list, you can manually add it by clicking the **Add button**. Follow the on-screen instructions for entering the **Name (SSID)** and the **Channel** number.
- “SETUP” is the default SSID of the machine. Do not choose this SSID.
- If the list is blank, check that the access point has power, and then see if the machine and the access point are within range for wireless communication. Then, click **Refresh**.



**14** If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click **OK** and *go to step* ***16***.



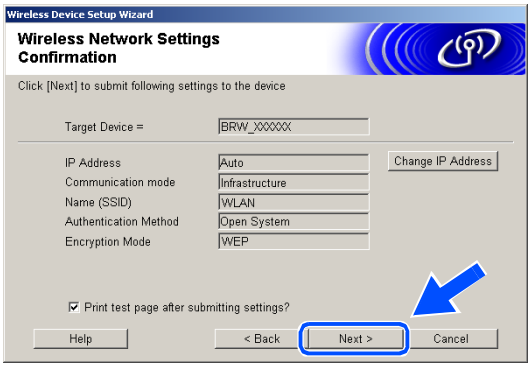

**15** If your network is configured for Authentication and Encryption, the following screen will appear. When configuring your Brother wireless machine, you must ensure that it is configured to match the Authentication and Encryption settings of your existing wireless network. Choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.




**Note**

- If you want to set more than one WEP key, click **Advanced**.
- If you do not know the Authentication or Encryption settings for network, contact your network administrator.

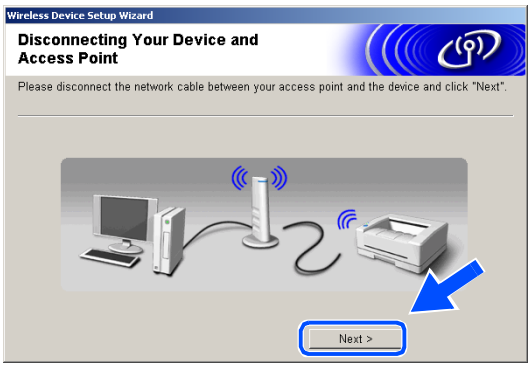
**16** Click **Next**. The settings will be sent to your machine. The settings will remain unchanged if you click **Cancel**.



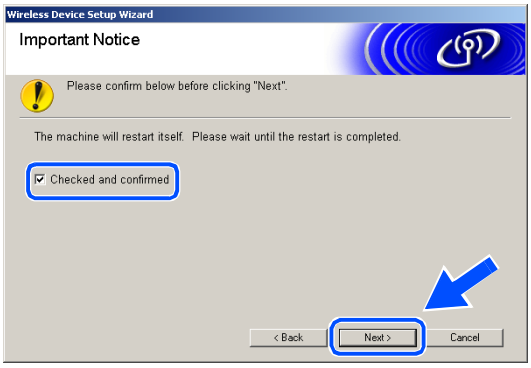

**Note**

- If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network. After making your selection, click **Next** and the Wizard will search for available wireless networks.
- The control panel settings will be automatically changed to `WLAN` when the wireless settings are sent to your machine.

**17** Disconnect the network cable between your access point (hub or router) and the machine, and click **Next**.

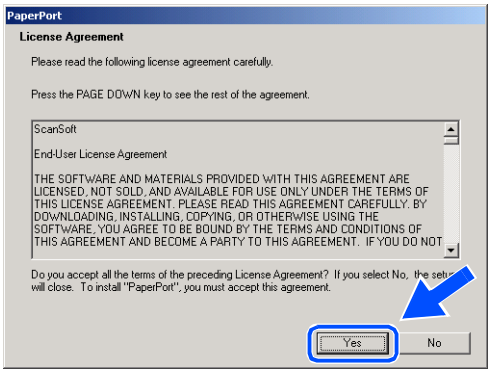



**18** The machine will restart automatically. After the machine is restarted, check **Checked and confirmed.**, and then click **Next**. Wait until the restart is completed.



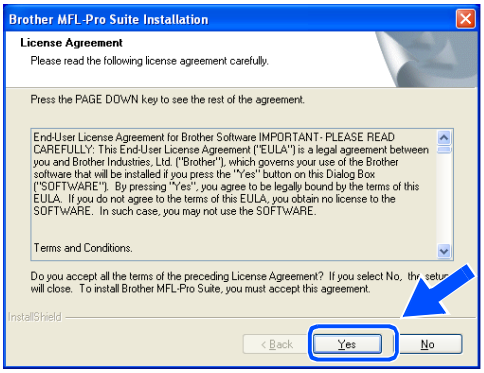

OK! **You have completed the wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *Step 6*, *go to step 19*.**

**19** The driver installation starts. After reading and accepting the ScanSoft® PaperPort® 9.0SE License Agreement, click **Yes**.
(Not available if you chose **Driver Install Only** in *Step 6*.)




**20** The installation of PaperPort® 9.0SE will automatically start and is followed by the installation of MFL-Pro Suite.

**21** When the Brother MFL-Pro Suite Software License Agreement window appears, click **Yes** if you agree to the Software License Agreement.

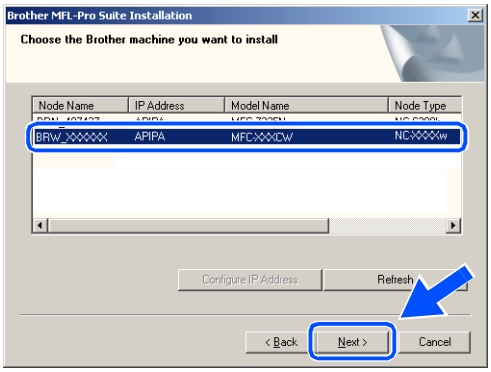



**22** The installation of the Brother drivers will automatically start. The installation screens appear one after another. Please wait for a while.

**Improper Setup**

- **DO NOT try to cancel any of the screens during this installation.**
- **If your wireless settings fail, and error message will appear during the installation of MFL-Pro Suite and the installation will be terminated. If you encounter this failure, please *go to step 4* and setup the wireless connection again.**

**23** If the machine is configured for your network, choose the machine from the list, and then click **Next**.



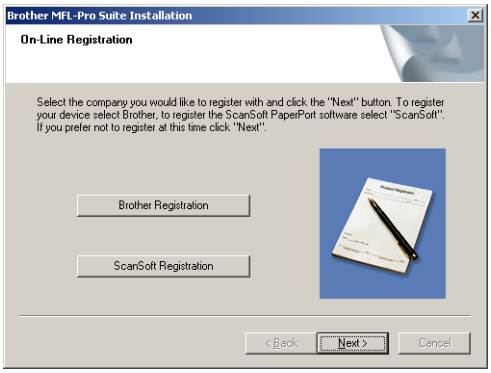

**Note**

This window will not appear if there is only one machine connected on the network as it will be chosen automatically.

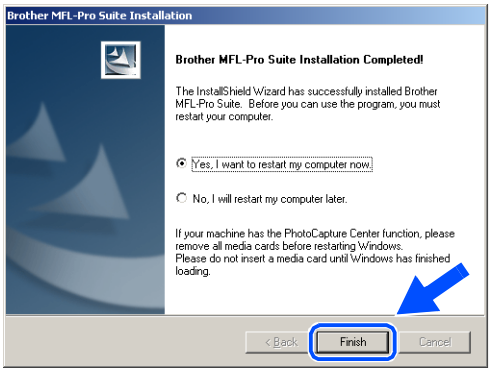
**24** If the machine is not yet configured for use on your network, the following screen appears.
Click **OK**.
The **Configure IP Address** windows will appear. Enter the proper IP address information for your network by following the on-screen instructions.




**25** When the Brother and ScanSoft® on-line Registration screen is displayed, make your selection and follow the on-screen instructions.




**26** Click Finish to restart your computer. (For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)




**Note**

After restarting the computer, the Installation Diagnostics will run automatically. If the installation is unsuccessful, the installation results window will be shown. If the Diagnostics shows a failure, please follow the on-screen instructions or read on-line help and FAQ's in Start/All Programs/Brother/MFL-Pro Suite MFC-820CW (or DCP-340CW or MFC-640CW).

OK!

**The MFL-Pro Suite including Brother Network Printer driver, Network Scanner driver and Network PhotoCapture Center™ have been installed and the installation is now complete.**

# Installation using with an access point that supports SecureEasySetup™ (Windows® 98/98SE/Me/2000 Professional/XP)



## Important

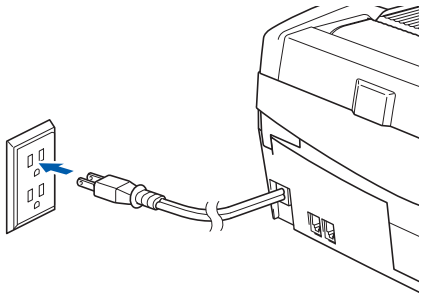
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

*1* Turn on the machine by plugging in the power cord.



*2* Turn on your computer.
(For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)
Close any applications running before installing the MFL-Pro Suite.

**Note**

Before installation, if you are using personal firewall software, disable it. Once you are sure that you can print after the installation, restart your personal firewall software.

*3* Put the supplied CD-ROM into your CD-ROM drive. If the model name screen appears, choose your machine. If the language screen appears, choose your language.

**4** The CD-ROM main menu will appear. Click Install MFL-Pro Suite.




**Note**

- If this window does not appear, use Windows® Explorer to run the setup.exe program from the root folder of the Brother CD-ROM.
- **If you are using Windows® 2000 Professional and have not installed Service Pack 3 (SP3) or greater:** To access the PhotoCapture Center™ features from your computer you may have to install a Windows® 2000 update first.

  The Windows® 2000 update is included with the MFL-Pro Suite installer. To install the update, follow the steps below:

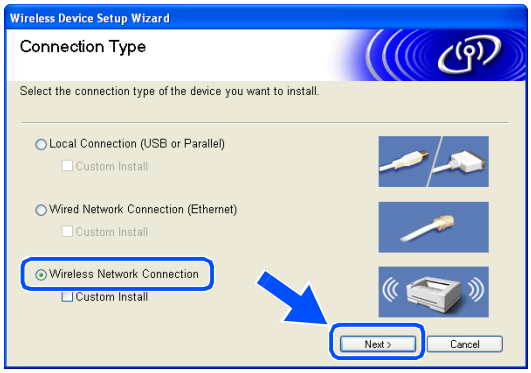
  1 Click **OK** to start installation of the Windows® update.

  2 When instructed, click **OK** to restart your computer.

  3 After the computer restarts, the installation of MFL-Pro Suite will automatically continue.

  If the installation does not continue automatically, open the main menu again by ejecting then reinserting the CD-ROM disc or double-click the **setup.exe** program from the root folder, and continue from *Step* ***4*** to install the MFL-Pro Suite.

**5** Choose **Wireless Network Connection**, and then click **Next**.



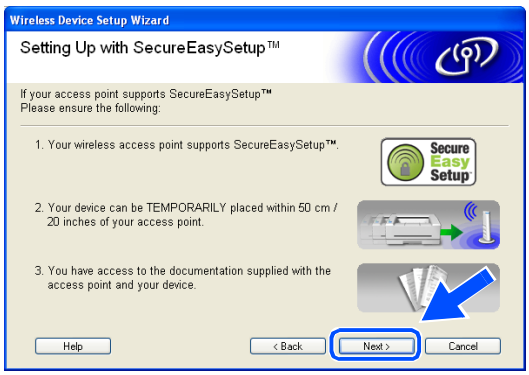
**6** Choose **Wireless Setup and Driver Install**, and then click **Next**.




**7** Choose **I'd like to use the SecureEasySetup™ function of my access point to configure my wireless device.** and click **Next**.




**8** Ensure the on-screen message and click **Next**.




**9** Temporary place the machine within a 50 cm/20 inch range from the access point.



**10** Refer to the instruction manual that came with your access point to set the SecureEasySetup™ mode of your access point.

**11** Put the machine in SecureEasySetup™ mode.
For DCP-340CW: Press ▲ or ▼ to choose **3**, **3**, **2** on the control panel
For MFC-640CW: Press **Menu/Set**, **5**, **3**, **2** on the control panel.
For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Setup WLAN` and then press **OK**. Press ▲ or ▼ for `SecureEasySetup` and press **OK**.

**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

**12** Press **Menu/Set**.

**Note**

If the LCD shows `Connection Error`, please try again.

**13** Click **Next**.

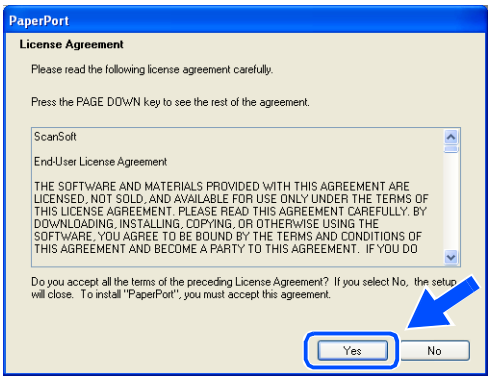



**14** The configuration is finished. Relocate the machine to a location that is within range of your access point.

OK!

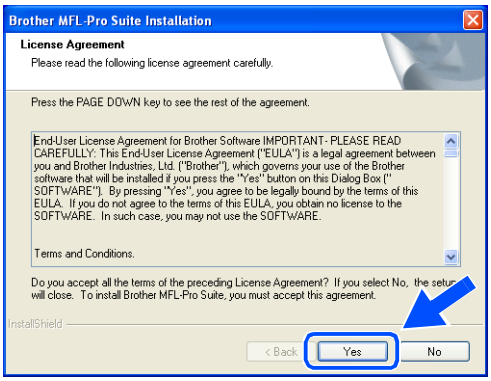
**You have completed the wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *Step 6*, *go to step 15*.**

**15** The driver installation starts. After reading and accepting the ScanSoft® PaperPort® 9.0SE License Agreement, click **Yes**.
(Not available if you chose **Driver Install Only** in *Step* ***6***.)




**16** The installation of PaperPort® 9.0SE will automatically start and is followed by the installation of MFL-Pro Suite.

**17** When the Brother MFL-Pro Suite Software License Agreement window appears, click **Yes** if you agree to the Software License Agreement.

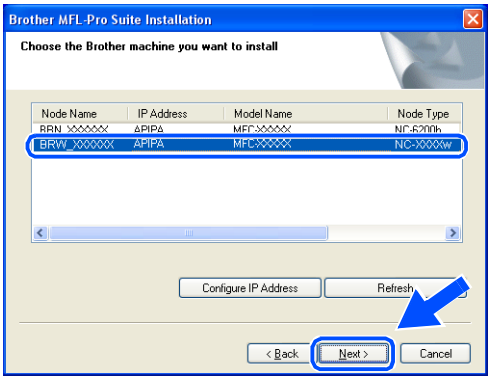



**18** The installation of the Brother drivers will automatically start. The installation screens appear one after another. Please wait for a while.

**Improper Setup**

- **DO NOT try to cancel any of the screens during this installation.**
- **If your wireless settings fail, and error message will appear during the installation of MFL-Pro Suite and the installation will be terminated. If you encounter this failure, please *go to step 4* and setup the wireless connection again.**

**19** If the machine is configured for your network, choose the machine from the list, and then click **Next**.



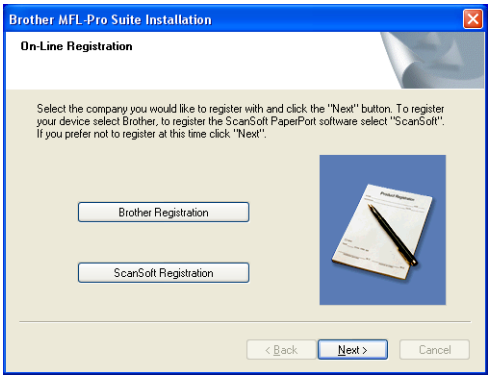

**Note**

This window will not appear if there is only one machine connected on the network as it will be chosen automatically.

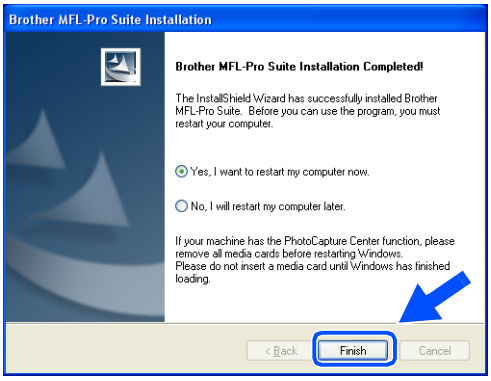
**20** If the machine is not yet configured for use on your network, the following screen appears.
Click **OK**.
The **Configure IP Address** windows will appear. Enter the proper IP address information for your network by following the on-screen instructions.




**21** When the Brother and ScanSoft® on-line Registration screen is displayed, make your selection and follow the on-screen instructions.




**22** Click Finish to restart your computer. (For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)



**Note**

After restarting the computer, the Installation Diagnostics will run automatically. If the installation is unsuccessful, the installation results window will be shown. If the Diagnostics shows a failure, please follow the on-screen instructions or read on-line help and FAQ's in Start/All Programs/Brother/MFL-Pro Suite MFC-820CW (or DCP-340CW or MFC-640CW).






**The MFL-Pro Suite including Brother Network Printer driver, Network Scanner driver and Network PhotoCapture Center™ have been installed and the installation is now complete.**

# Installation using a wireless computer in Ad-hoc Mode

## For Windows® 98/98SE/Me/2000 Professional/XP



### Important

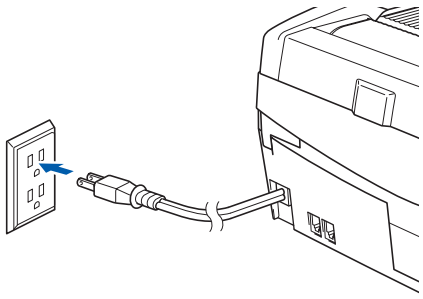
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

*1* Turn on the machine by plugging in the power cord.



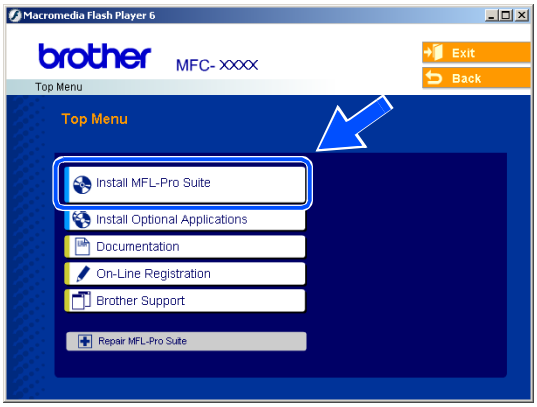
*2* Turn on your computer.
(For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)
Close any applications running before installing the MFL-Pro Suite.

**Note**

Before installation, if you are using personal firewall software, disable it. Once you are sure that you can print after the installation, restart your personal firewall software.

*3* Put the supplied CD-ROM into your CD-ROM drive. If the model name screen appears, choose your machine. If the language screen appears, choose your language.

**4** The CD-ROM main menu will appear. Click Install MFL-Pro Suite.




**Note**

- If this window does not appear, use Windows® Explorer to run the setup.exe program from the root folder of the Brother CD-ROM.
- **If you are using Windows® 2000 Professional and have not installed Service Pack 3 (SP3) or greater:** To access the PhotoCapture Center™ features from your computer you may have to install a Windows® 2000 update first.

  The Windows® 2000 update is included with the MFL-Pro Suite installer. To install the update, follow the steps below:

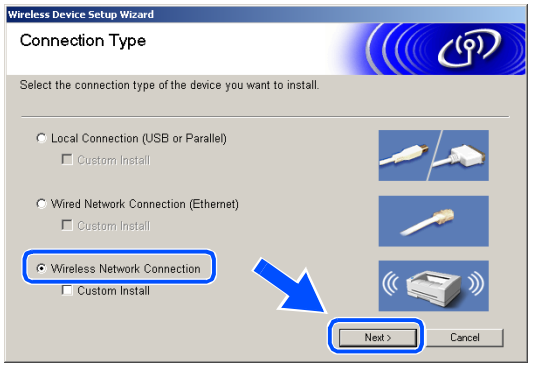
  1 Click **OK** to start installation of the Windows® update.

  2 When instructed, click **OK** to restart your computer.

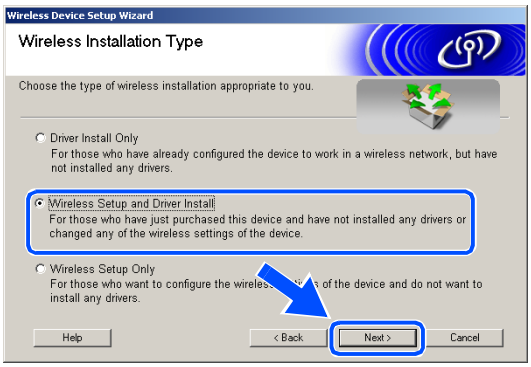
  3 After the computer restarts, the installation of MFL-Pro Suite will automatically continue.

  If the installation does not continue automatically, open the main menu again by ejecting then reinserting the CD-ROM disc or double-click the **setup.exe** program from the root folder, and continue from *Step **4*** to install the MFL-Pro Suite.

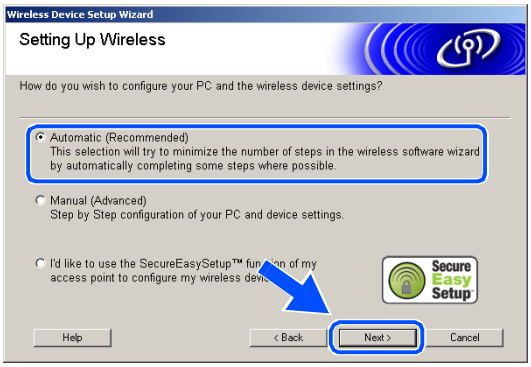
**5** Choose **Wireless Network Connection**, and then click **Next**.



**6** Choose **Wireless Setup and Driver Install**, and then click **Next**.



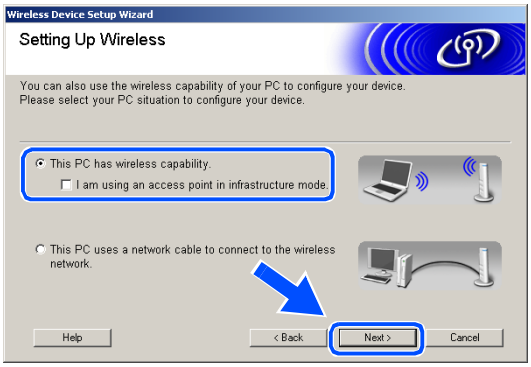

**7** Choose **Automatic (Recommended)** and then click **Next**.




**8** Choose **I'm not able to connect my device to my access point with a network cable.** Click **Next**.



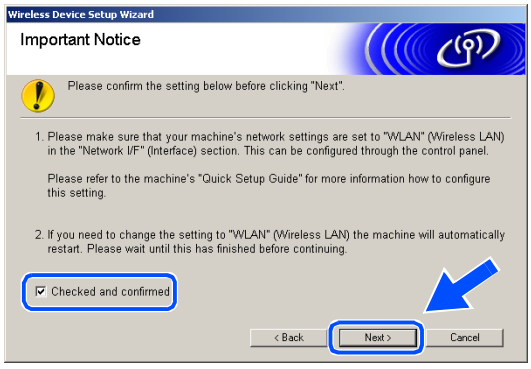

**9** If you are using a wireless computer, choose **This PC has wireless capability**, and make sure **I am using an access point in infrastructure mode** is not checked. Click **Next**.



If you are using a wired computer, choose **This PC uses a network cable to connect to the wireless network.**, and you must configure the wireless settings from the control panel. Click **Next** and follow the on-screen instructions to complete the setup. See *Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3. When finished, go to the driver installation in *Step **19***.




**10** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `WLAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `WLAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

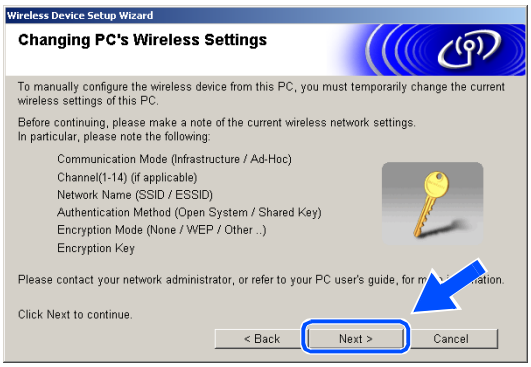
For MFC-820CW: On the cotrol panel, press **Menu**. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `WLAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

**Note**

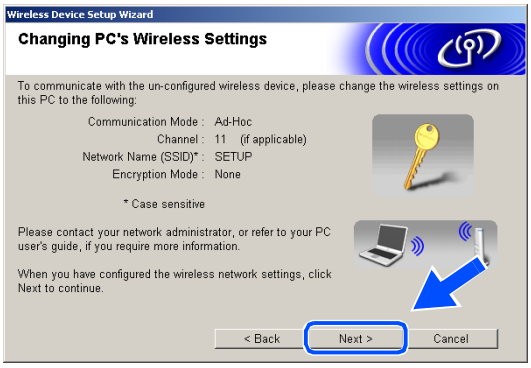
It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

You need to temporarily change your PC's wireless settings. Please follow the on-screen instructions. Please make sure you take notes on all the settings such as SSID or channel of your PC. You may need them when if you want to restore the current settings in future.




| Item | Record the current wireless computer settings |
|---|---|
| Communication mode: (Infrastructure/Ad-hoc) | |
| Channel: (1-14) | |
| Network name (SSID/ESSID) | |
| Authentication method (Open system/Shared key) | |
| Encryption: (None/WEP/Other) | |
| Encryption key: | |

***11*** To communicate with the un-configured wireless machine, change the wireless settings on this PC to the machine's default settings which are shown on the screen. Click **Next**.



**12** If more than one wireless machine is available on the network, the following list appears. If the list is blank, check if the machine is powered on, and then click **Refresh**. Choose the machine you wish to configure, and click **Next**.

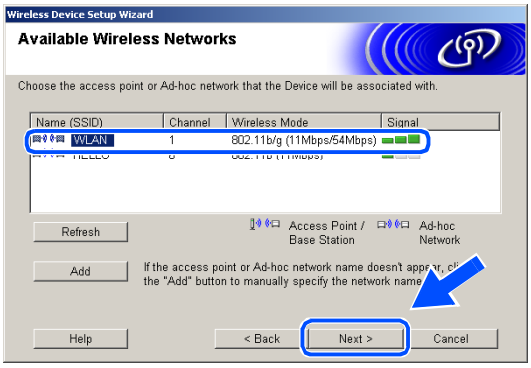



**Note**

The Default Node name of the NC-xxxx (where “xxxx” is your model name) is “BRW_xxxxxx” (where “xxxxxx” is the last six digits of Ethernet address).

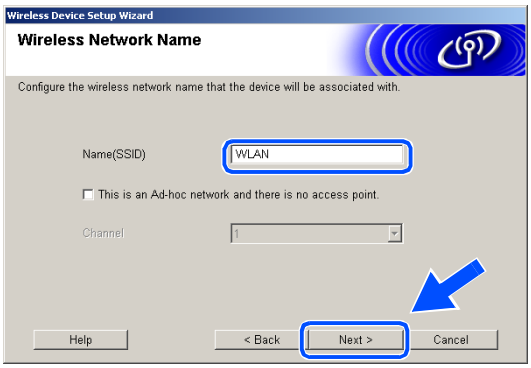
**13** The wizard will search for wireless networks available from your machine. If more than one wireless network is available, the following list appears. Choose the Ad-hoc network you wish to associate the machine with, and then click **Next**.

If no Ad-hoc wireless network are available, you need to create a new wireless network. *Go to step **16***.




**Note**

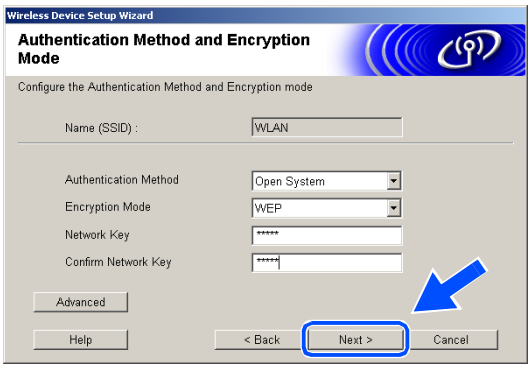
- If your target Ad-hoc network does not appear on the list, you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)** and the **Channel** number.
- If the list is blank, check if the machine is within range for wireless communication. Then, click **Refresh**.



**14** If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click **OK** and *go to step* ***17***.



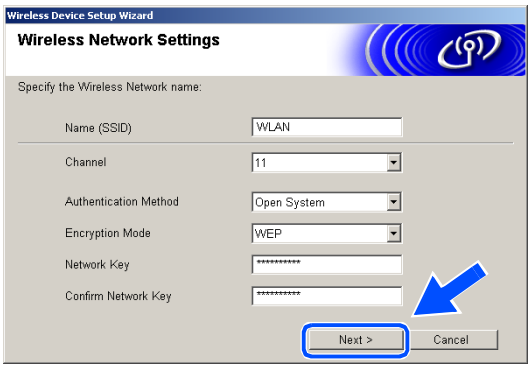

**15** If your network is configured for Authentication and Encryption, the following screen will appear. When configuring your Brother wireless machine, you must ensure that it is configured to match the Authentication and Encryption settings of your existing wireless network. Choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.




**Note**

- If you want to set more than one WEP key, click **Advanced**.
- If you do not know the Authentication or Encryption settings for network, contact your network administrator.

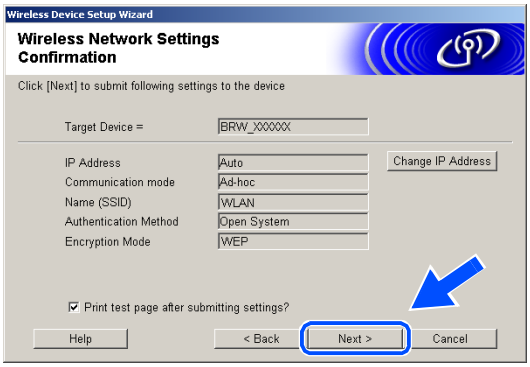
**16** Enter a new SSID and choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.




**Note**

If you do not know the Authentication or Encryption settings for network, contact your network administrator.

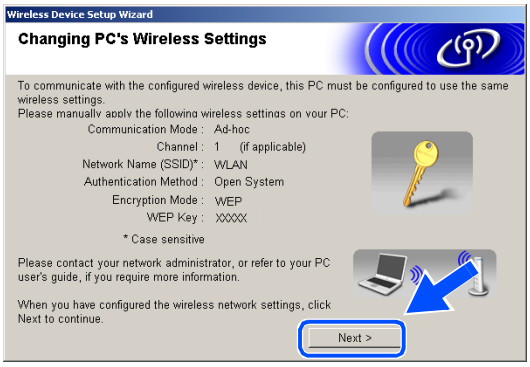
**17** Click **Next**. The settings will be sent to your machine. The settings will remain unchanged if you click **Cancel**.




**Note**

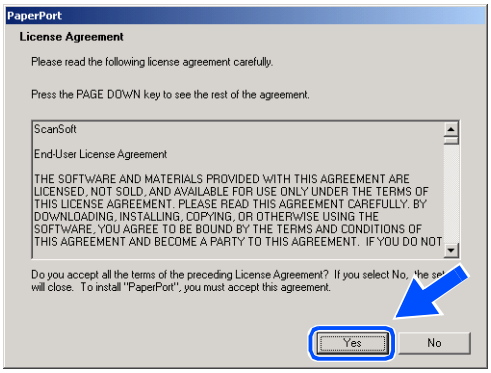
If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network. After making your selection, click **Next** and the Wizard will search for available wireless networks.

**18** To communicate with the configured wireless device, you must configure your PC to use same wireless settings. Manually change the wireless settings on your PC to match the machine's wireless settings shown on this screen. Click **Next**.
(The settings shown on this screen are for example only. Your settings will not be the same.)



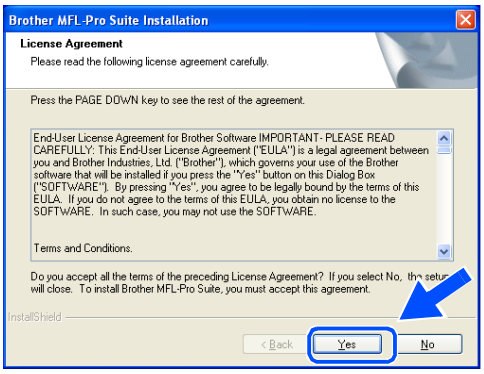

**You have completed the wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *Step 6*, *go to step 19*.**

**19** The driver installation starts. After reading and accepting the ScanSoft® PaperPort® 9.0SE License Agreement, click **Yes**.
(Not available if you chose **Driver Install Only** in *Step 6*.)



**20** The installation of PaperPort® 9.0SE will automatically start and is followed by the installation of MFL-Pro Suite.

**21** When the Brother MFL-Pro Suite Software License Agreement window appears, click **Yes** if you agree to the Software License Agreement.

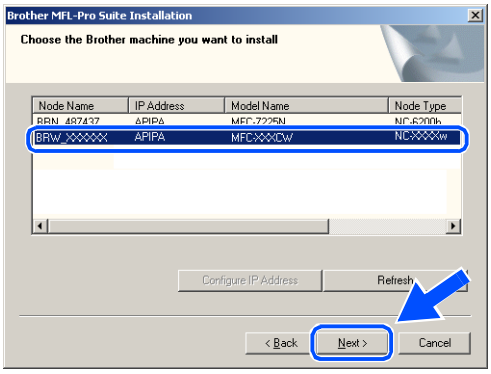



**22** The installation of the Brother drivers will automatically start. The installation screens appear one after another. Please wait for a while.

**Improper Setup**

- **DO NOT try to cancel any of the screens during this installation.**
- **If your wireless settings fail, and error message will appear during the installation of MFL-Pro Suite and the installation will be terminated. If you encounter this failure, please *go to step 4* and setup the wireless connection again.**

**23** If the machine is configured for your network, choose the machine from the list, and then click **Next**.



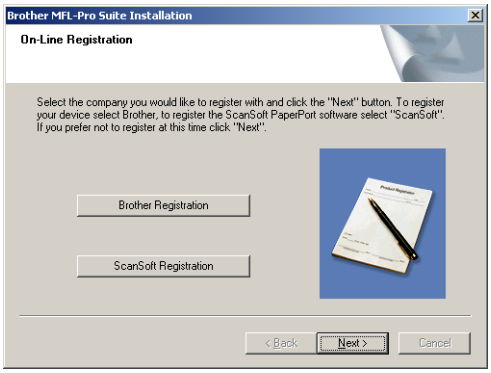

**Note**

This window will not appear if there is only one machine connected on the network as it will be chosen automatically.

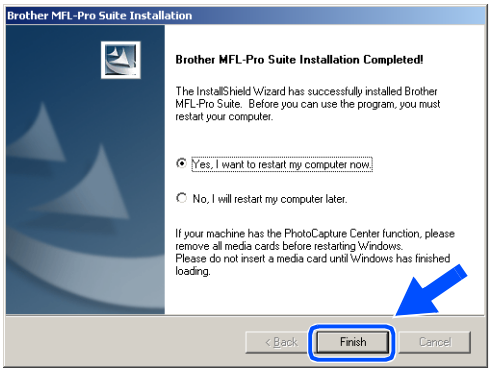
**24** If the machine is not yet configured for use on your network, the following screen appears.
Click **OK**.
The **Configure IP Address** windows will appear. Enter the proper IP address information for your network by following the on-screen instructions.




**25** When the Brother and ScanSoft® on-line Registration screen is displayed, make your selection and follow the on-screen instructions.




**26** Click Finish to restart your computer. (For Windows® 2000 Professional/XP, you must be logged on with Administrator rights.)




**Note**

After restarting the computer, the Installation Diagnostics will run automatically. If the installation is unsuccessful, the installation results window will be shown. If the Diagnostics shows a failure, please follow the on-screen instructions or read on-line help and FAQ's in Start/All Programs/Brother/MFL-Pro Suite MFC-820CW (or DCP-340CW or MFC-640CW).

OK!

**The MFL-Pro Suite including Brother Network Printer driver, Network Scanner driver and Network PhotoCapture Center™ have been installed and the installation is now complete.**

# 9 Wireless installation for Macintosh®

## Installation using a wireless computer in Infrastructure mode for Mac OS® X 10.2.4 or greater



### Important

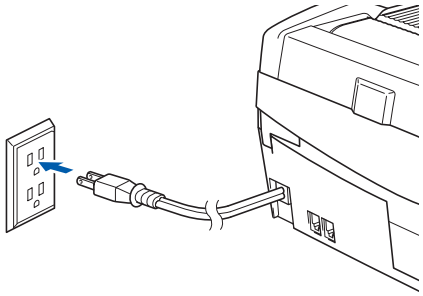
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

1. Turn on the machine by plugging in the power cord.



2. Turn on your Macintosh®.

3. Put the supplied CD-ROM into your CD-ROM drive.

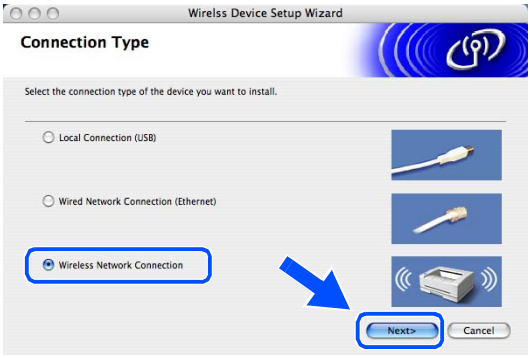
4. Double-click the **Start Here OSX** icon to install drivers and MFL-Pro Suite. If the language screen appears, choose your language.



**5** Click **MFL-Pro Suite** to install.




**6** Choose **Wireless Network Connection**, and then click **Next**.




**7** Choose **Wireless Setup and Driver Install**, and then click **Next**.




**8** Choose **Automatic (Recommended)** and then click **Next**.



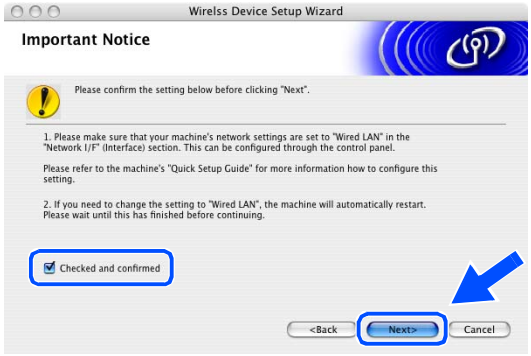
**9** For configuration, it is recommended that you temporarily connect your Brother wireless device directly to a free port on your access point, hub or router using a network cable.




If you can temporarily connect with a network cable:
Choose **I'm able to temporarily connect my device to my access point with a network cable** and then click **Next**.
*Go to step **10**.*

If you do not have a network cable or cannot temporarily connect the Brother wireless device to your access point:
Choose **I'm not able to connect my device to my access point with a network cable** and then click **Next**.
*Go to step **11**.*

**10** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `Wired LAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `Wired LAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

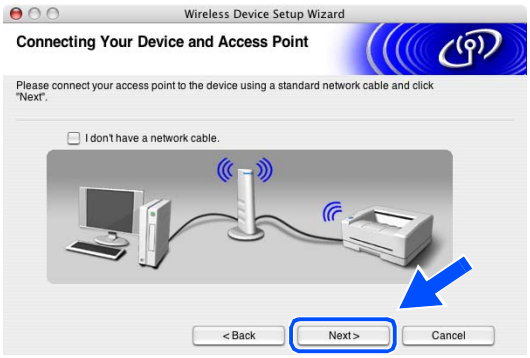
For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `Wired LAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

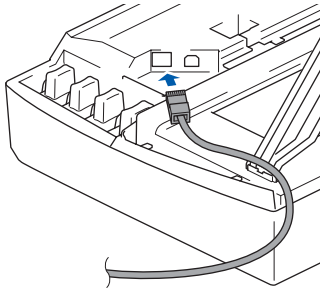
If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

When the following screen appears, open the scanner cover to its open position. Insert the network cable to your access point (hub or router) and then to the machine. You will find the LAN socket above and to the left of the ink cartridge slots, as shown. Click **Next** and *go to step **14***.



**Note**

If you do not have a network cable, check **I don't have a network cable** and click **Next**. You will need to configure the wireless settings from the control panel. Follow the onscreen instruction to complete the setup. When the setup is finished, *go to step **23*** for driver installation.




***11*** (Continued from *step **9***) If you choose **This PC has wireless capability.**, check **I am using an access point in infrastructure mode**, and then click **Next**.

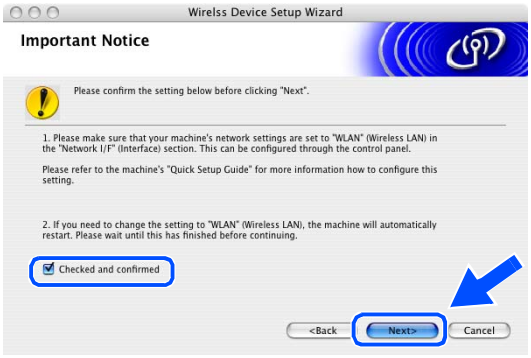


**Note**

If you choose **This PC uses a network cable to connect to the wireless network.**, you must configure the wireless settings from the control panel. Click **Next** and follow the on-screen instructions to complete the setup. When finished, go to the driver installation in *step **23***.




**12** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `WLAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `WLAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

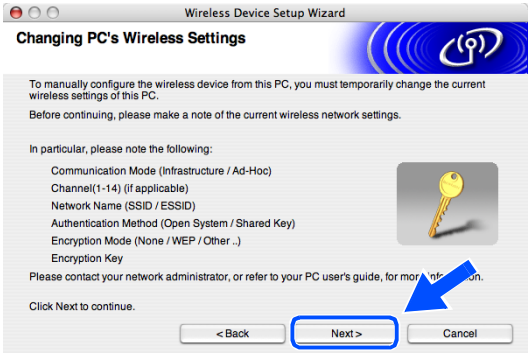
For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `WLAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

You need to temporarily change the wireless settings of your Macintosh®. Please follow the on-screen instructions. Please make sure you take notes on all the settings such as SSID or channel of your Macintosh®. You will need them before you finish your setup.




| Item | Record the current wireless computer settings |
|---|---|
| Communication mode: (Infrastructure/Ad-hoc) | |
| Channel: (1-14) | |
| Network name (SSID/ESSID) | |
| Authentication method (Open system/Shared key) | |
| Encryption: (None/WEP/Other) | |
| Encryption key: | |

***13*** To communicate with the un-configured wireless machine, temporarily change the wireless settings on your Macintosh® to match machine's default settings shown on this screen. Click **Next**.



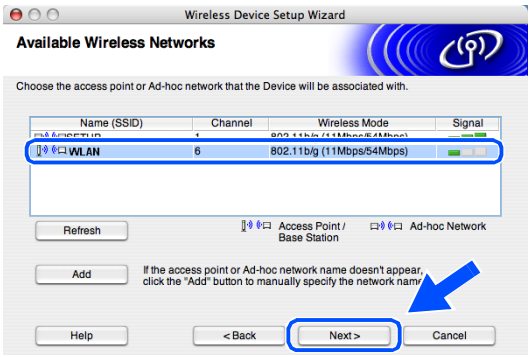
**14** If more than one wireless machine is available on the network, the following list appears. If the list is blank, check that the access point and the machine are powered on, and then click **Refresh**. Choose the machine you wish to configure, and click **Next**.




**Note**

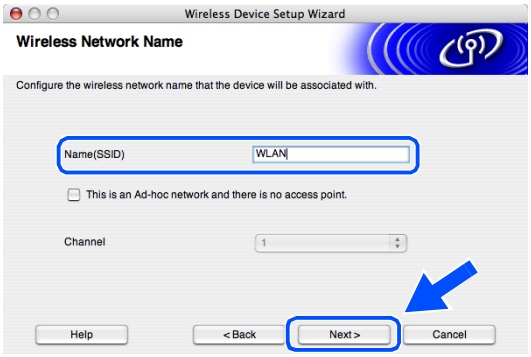
The Default Node name of the NC-xxxx (where “xxxx” is your model name) is “BRW_xxxxxx” or “BRN_xxxxxx” (where “xxxxxx” is the last six digits of Ethernet address).

**15** The wizard will search for wireless networks available from your machine. If more than one wireless network is available, the following list appears. Choose the access point you wish to associate the machine with, and then click **Next**.




**Note**

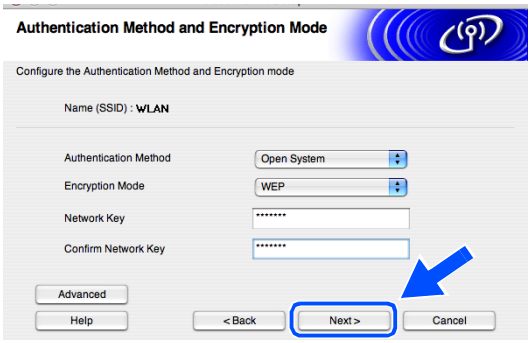
- If your target access point does not appear on the list, you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)** and the **Channel** number.
- “SETUP” is the default SSID of the machine. Do not choose this SSID.
- If the list is blank, check that the access point has power, and then see if the machine and the access point are within range for wireless communication. Then, click **Refresh**.



**16** If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click **OK** and *go to step **18***.



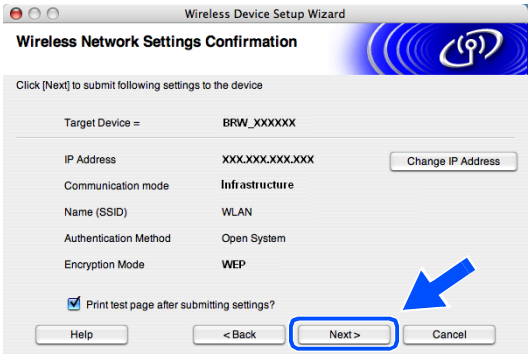

**17** If your network is configured for Authentication and Encryption, the following screen will appear. When configuring your Brother wireless machine, you must ensure that it is configured to match the Authentication and Encryption settings of your existing wireless network. Choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.




**Note**

- If you want to set more than one WEP key, click **Advanced**.
- If you do not know the Authentication or Encryption settings for network, contact your network administrator.

**18** Click **Next**. The settings will be sent to your machine. The settings will remain unchanged if you click **Cancel**.

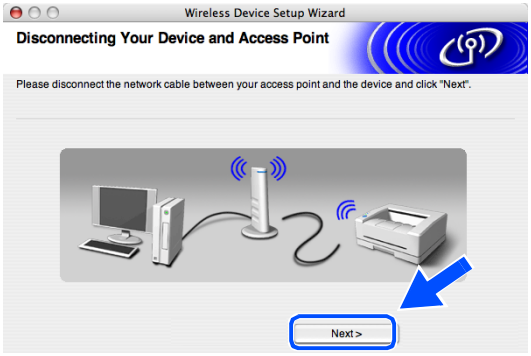



**Note**

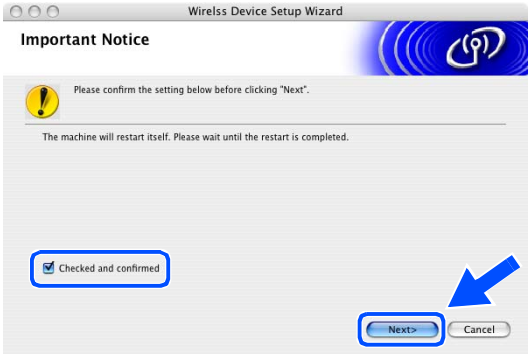
- If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network. After making your selection, click **Next** and the Wizard will search for available wireless networks.
- The control panel settings will be automatically changed to `WLAN` when the wireless settings are sent to your machine.

**19** If you chose to use a network cable in *step **9***, *go to step **20***.
If you chose not to use a network cable in *step **9***, *go to step **22***.

**20** Disconnect the network cable between your access point (hub or router) and the machine, and click **Next**.




**21** The machine will restart automatically. After the machine is restarted, check **Checked and confirmed.**, and then click **Next**. Wait until the restart is completed. *Go to step* ***23***.




**22** Using the information you recorded in *step* ***12***, return the wireless settings of your computer back to their original settings. Click **Exit**.

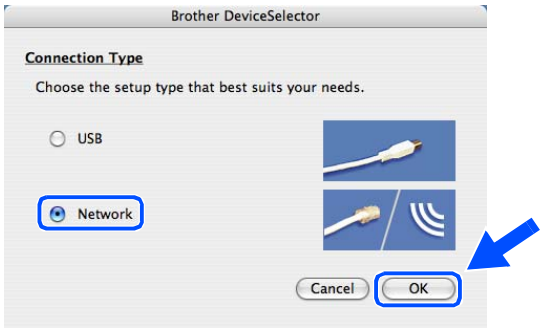



OK!

**You have completed wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *step 7*, *go to step 23*.**

**23** The driver installation starts. Follow the on-screen instructions and restart your Macintosh®. (Not available if you chose **Driver Install Only** in *step 7*.)

**24** When the **Brother DeviceSelector** window appears, choose **Network** and then click **OK**. The **Brother DeviceSelector** windows will not appear if you have also connected a USB interface cable to the machine before restarting your Macintosh or if you are overwriting a previously installed version of the Brother Software. If you encounter this problem, continue but skip *step* ***25*** through ***27***. After the software installation is completed, you should choose your Brother machine from the Model pop-up menu in the main screen of ControlCenter2. For details, see Chapter 10 in the Software User's Guide on the CD-ROM.



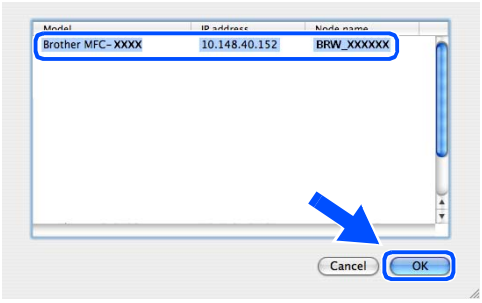

**25** If you want to use the machine's **Scan** key to scan over the network, you must check the **Register your computer with the "Scan To" functions at the machine** box. You must also enter a name for your Macintosh® in **Display Name**. The name you enter will appear on the machine's LCD when you press the **Scan** key and choose a scan option. You can enter any name up to 15 characters long. (For more information on network scanning, see Chapter 11 of the Software User's Guide on the CD-ROM.)



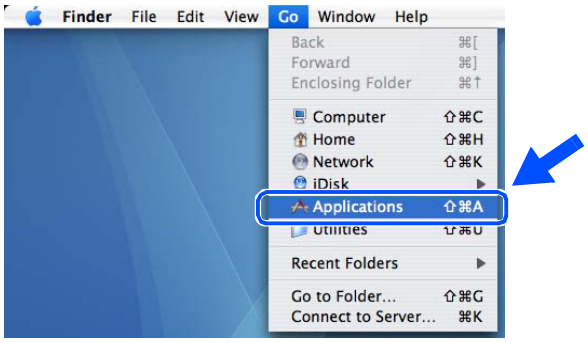

**26** Click **Browse**.



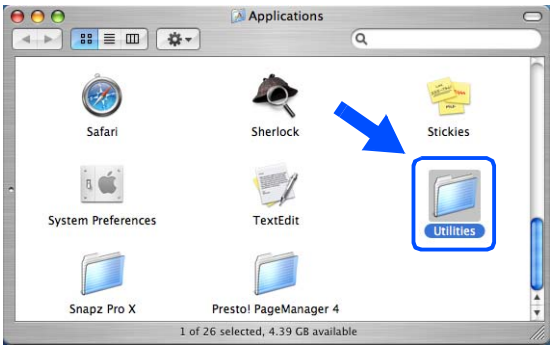

**27** Choose your model name, and then click **OK**.



**28** Click **Go**, then **Applications**.

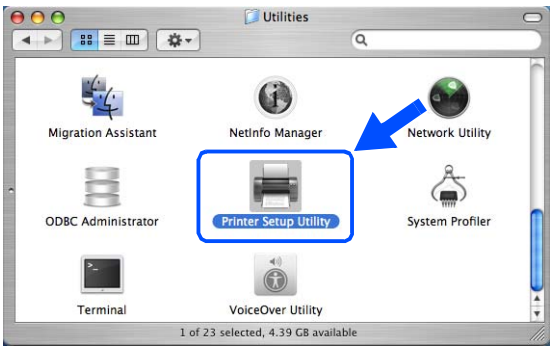



**29** Double-click the **Utilities** folder.



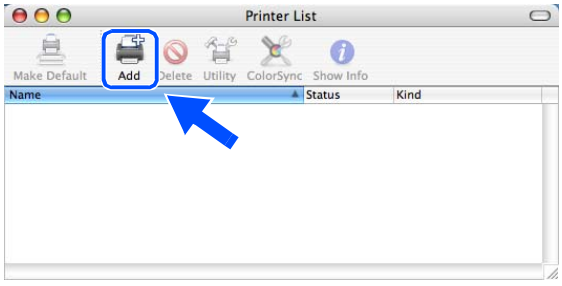

**30** Mac OS® X 10.3 or greater users:
Double-click the **Printer Setup Utility** icon.

For Mac OS® X 10.2.x users:
Double-click the **Print Center** icon.

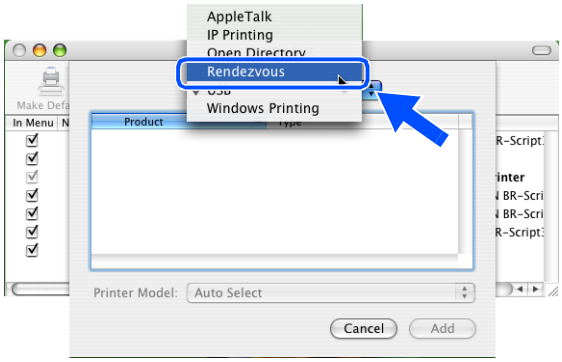



**31** Click **Add**.

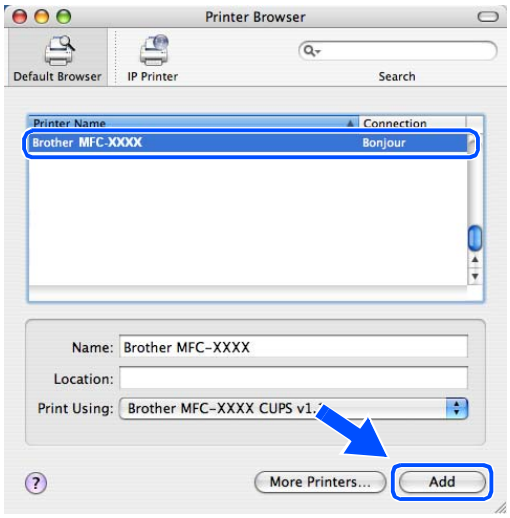
Mac OS X 10.2.4 to 10.3 users; *go to step* ***32***.
Mac OS X 10.4 users; *go to step* ***33***.



**32** Make the selection shown (For Mac OS X 10.2.4 to 10.3 users).

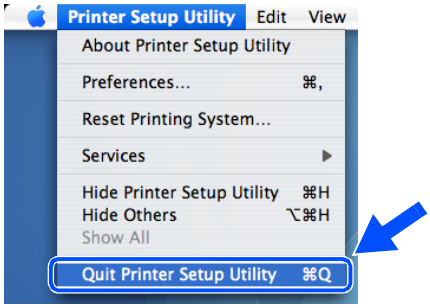



**33** Choose **Brother MFC-XXXX** (where XXXX is your model name), and then click **Add**.




**34** Mac OS® X 10.3 or greater users:
Click **Printer Setup Utility**, then **Quit Printer Setup Utility**.

For Mac OS® X 10.2.x users:
Click **Print Center**, then **Quit Print Center**.




OK!

**The MFL-Pro Suite, Printer driver, Scanner driver and Control Center2 have been installed.**

**Note**

For more information about connecting the machine to a Macintosh® network, see *Network printing from Macintosh®* on page 6-1.

**35** To install Presto!® PageManager®, click the **Presto!PageManager** icon and follow the on-screen instructions.






**Note**

When Presto!® PageManager® is installed, OCR capability is added to the Brother ControlCenter2. You can also easily scan, share, and organize photos and documents using Presto!® PageManager®.

OK!

**Presto!® PageManager® has been installed and the installation is now complete.**

# Installation using a wired computer in Infrastructure mode for Mac OS® X 10.2.4 or greater



## Important

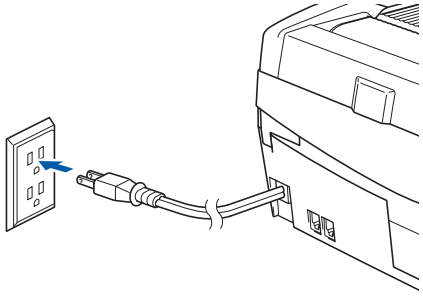
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

1. Turn on the machine by plugging in the power cord.



2. Turn on your Macintosh®.

3. Put the supplied CD-ROM into your CD-ROM drive.

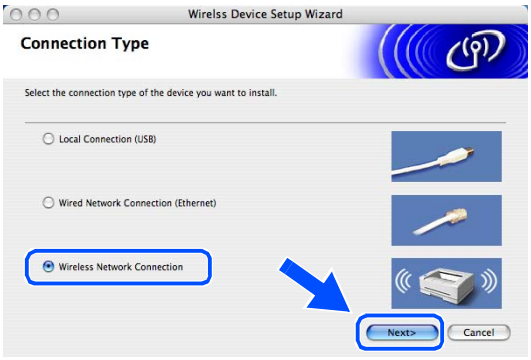
4. Double-click the **Start Here OSX** icon to install drivers and MFL-Pro Suite. If the language screen appears, choose your language.



**5** Click **MFL-Pro Suite** to install.




**6** Choose **Wireless Network Connection**, and then click **Next**.




**7** Choose **Wireless Setup and Driver Install**, and then click **Next**.




**8** Choose **Automatic (Recommended)** and then click **Next**.



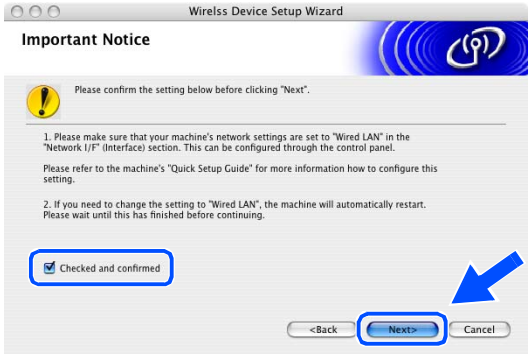
**9** For configuration, it is recommended that you temporarily connect your Brother wireless device directly to a free port on your access point, hub or router using a network cable.




If you can temporarily connect with a network cable:
Choose **I'm able to temporarily connect my device to my access point with a network cable** and then click **Next**.
*Go to step **10**.*

If you do not have a network cable or cannot temporarily connect the Brother wireless device to your access point:
Choose **I'm not able to connect my device to my access point with a network cable** and then click **Next**.
*Go to step **11**.*

**10** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `Wired LAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `Wired LAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

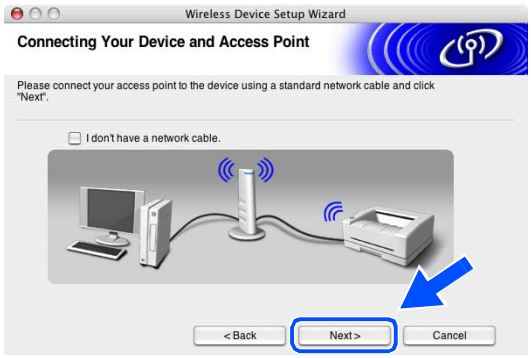
For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `Wired LAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wireless network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

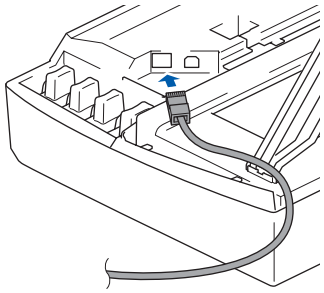
If `Accepted` is displayed, press **Stop/Exit**. Check the box and click **Next**.

**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

When the following screen appears, open the scanner cover to its open position. Insert the network cable to your access point (hub or router) and then to the machine. You will find the LAN socket above and to the left of the ink cartridge slots, as shown. Click **Next** and *go to step **13***.



**Note**

If you do not have a network cable, check **I don't have a network cable** and click **Next**. You will need to configure the wireless settings from the control panel. Follow the onscreen instruction to complete the setup. When the setup is finished, *go to step **20*** for driver installation.




***11*** (Continued from *step **9***) Choose **This PC has a network cable to connect to the wireless network.**, and then click **Next**.



**12** Follow the on-screen instructions to complete the setup by the control panel. See *Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3. When finished, go to the driver installation in *step* ***20***.



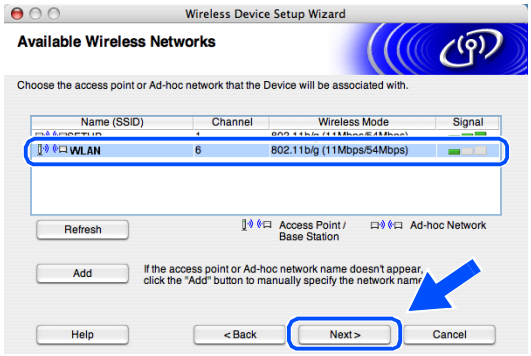

**13** If more than one wireless machine is available on the network, the following list appears. If the list is blank, check that the access point and the machine are powered on, and then click **Refresh**. Choose the machine you wish to configure, and click **Next**.




**Note**

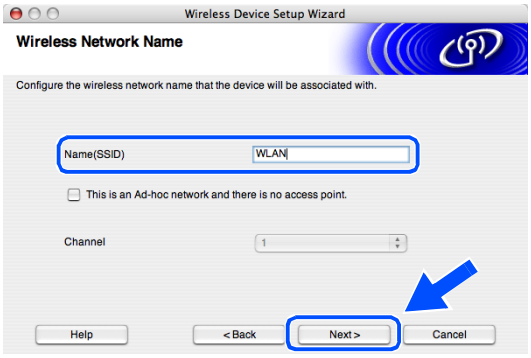
The Default Node name of the NC-xxxx (where “xxxx” is your model name) is “BRW_xxxxxx” or “BRN_xxxxxx” (where “xxxxxx” is the last six digits of Ethernet address).

**14** The wizard will search for wireless networks available from your machine. If more than one wireless network is available, the following list appears. Choose the access point you wish to associate the machine with, and then click **Next**.



**Note**

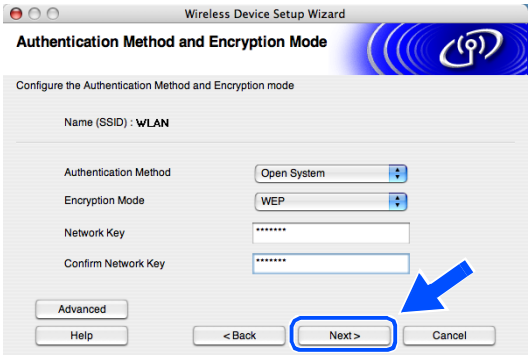
- If your target access point does not appear on the list, you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)** and the **Channel** number.
- “SETUP” is the default SSID of the machine. Do not choose this SSID.
- If the list is blank, check that the access point has power, and then see if the machine and the access point are within range for wireless communication. Then, click **Refresh**.




**15** If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click **OK** and *go to step* ***17***.



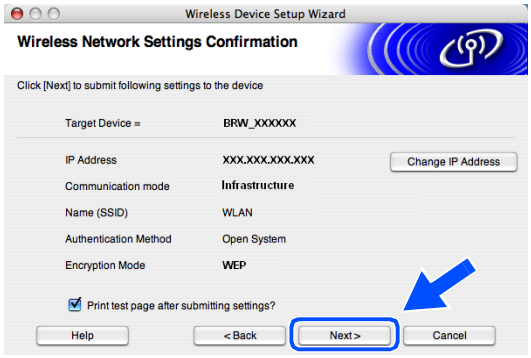

**16** If your network is configured for Authentication and Encryption, the following screen will appear. When configuring your Brother wireless machine, you must ensure that it is configured to match the Authentication and Encryption settings of your existing wireless network. Choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.




**Note**

- If you want to set more than one WEP key, click **Advanced**.
- If you do not know the Authentication or Encryption settings for network, contact your network administrator.

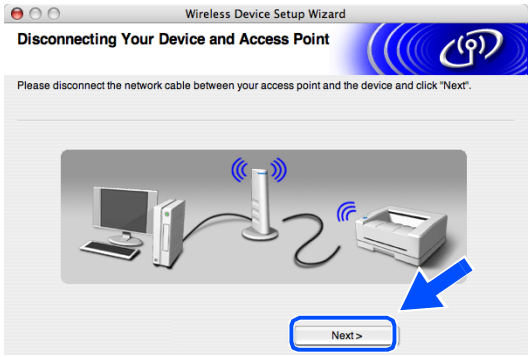
**17** Click **Next**. The settings will be sent to your machine. The settings will remain unchanged if you click **Cancel**.



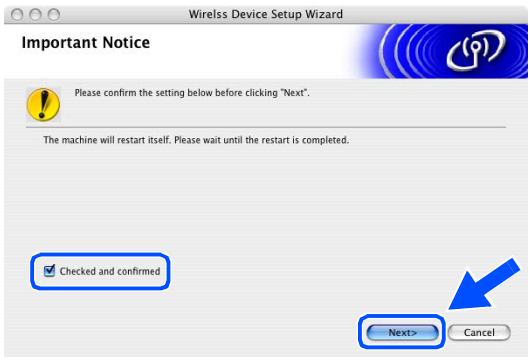

**Note**

- If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network. After making your selection, click **Next** and the Wizard will search for available wireless networks.
- The control panel settings will be automatically changed to `WLAN` when the wireless settings are sent to your machine.

**18** Disconnect the network cable between your access point (hub or router) and the machine, and click **Next**.




**19** The machine will restart automatically. After the machine is restarted, check **Checked and confirmed.**, and then click **Next**. Wait until the restart is completed.

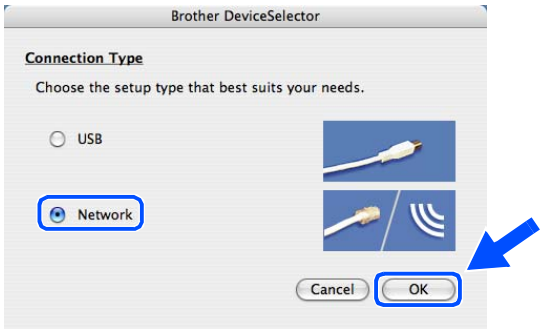



OK!

**You have completed the wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *step 7*, *go to step 20*.**

**20** The driver installation starts. Follow the on-screen instructions and restart your Macintosh®. (Not available if you chose **Driver Install Only** in *step* ***7***.)

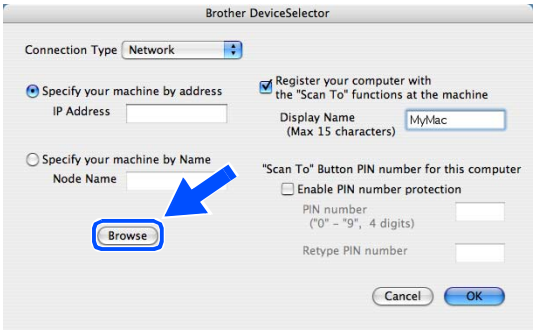
**21** When the **Brother DeviceSelector** window appears, choose **Network** and then click **OK**. The **Brother DeviceSelector** windows will not appear if you have also connected a USB interface cable to the machine before restarting your Macintosh or if you are overwriting a previously installed version of the Brother Software. If you encounter this problem, continue but skip *step* ***22*** through ***24***. After the software installation is completed, you should choose your Brother machine from the Model pop-up menu in the main screen of ControlCenter2. For details, see Chapter 10 in the Software User's Guide on the CD-ROM.



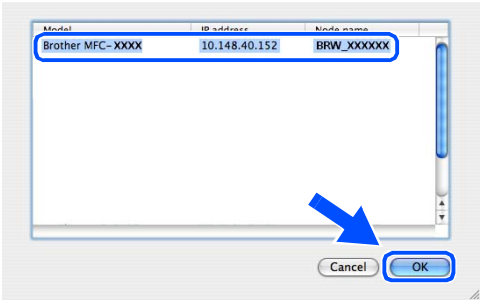

**22** If you want to use the machine's **Scan** key to scan over the network, you must check the **Register your computer with the "Scan To" functions at the machine** box. You must also enter a name for your Macintosh® in **Display Name**. The name you enter will appear on the machine's LCD when you press the **Scan** key and choose a scan option. You can enter any name up to 15 characters long. (For more information on network scanning, see Chapter 11 of the Software User's Guide on the CD-ROM.)



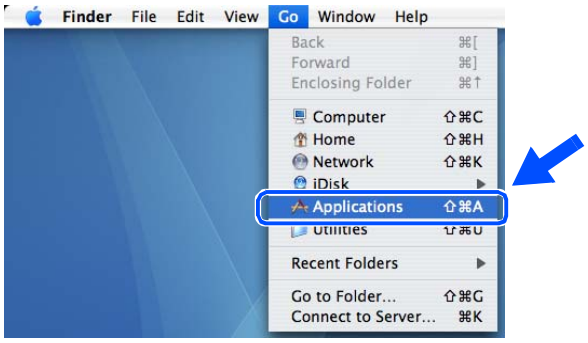

**23** Click **Browse**.



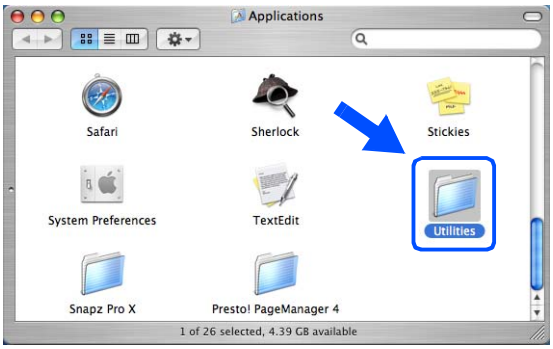

**24** Choose your model name, and then click **OK**.



**25** Click **Go**, then **Applications**.

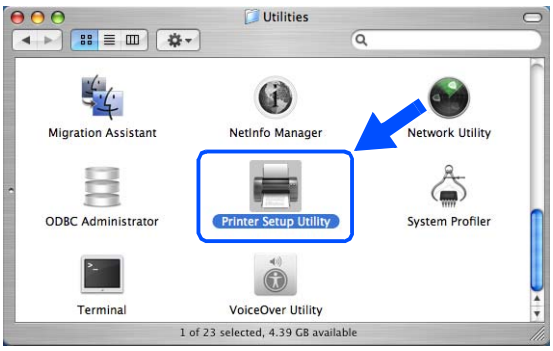



**26** Double-click the **Utilities** folder.



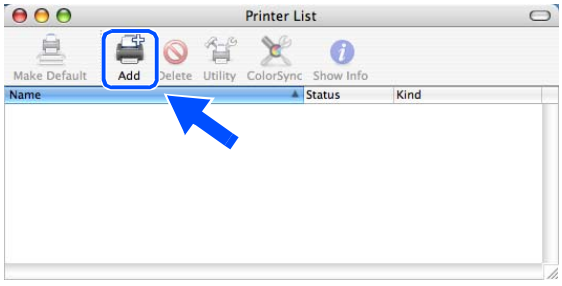

**27** Mac OS® X 10.3 or greater users:
Double-click the **Printer Setup Utility** icon.

For Mac OS® X 10.2.x users:
Double-click the **Print Center** icon.

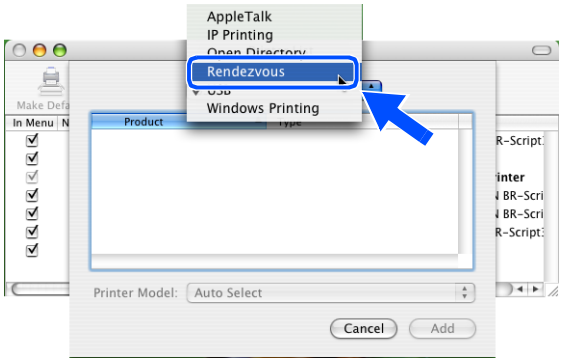



**28** Click **Add**.

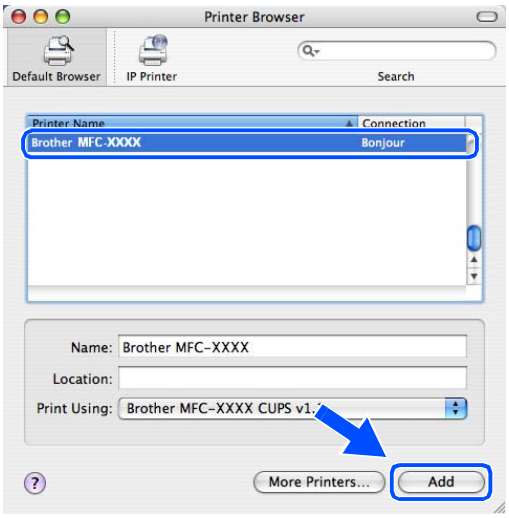
Mac OS X 10.2.4 to 10.3 users; *go to step* ***29***.
Mac OS X 10.4 users; *go to step* ***30***.



**29** Make the selection shown (For Mac OS X 10.2.4 to 10.3 users).

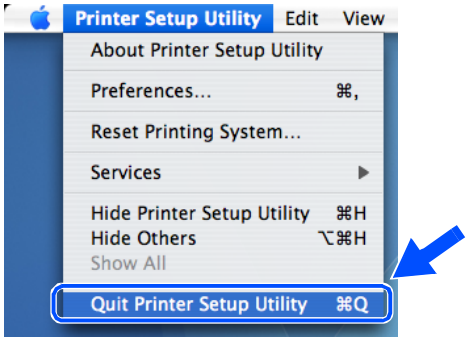



**30** Choose **Brother MFC-XXXX** (where XXXX is your model name), and then click **Add**.




**31** Mac OS® X 10.3 or greater users:
Click **Printer Setup Utility**, then **Quit Printer Setup Utility**.

For Mac OS® X 10.2.x users:
Click **Print Center**, then **Quit Print Center**.




**The MFL-Pro Suite, Printer driver, Scanner driver and Control Center2 have been installed.**

**Note**

For more information about connecting the machine to a Macintosh® network, see *Network printing from Macintosh®* on page 6-1.

**32** To install Presto!® PageManager®, click the **Presto!PageManager** icon and follow the on-screen instructions.






**Note**

When Presto!® PageManager® is installed, OCR capability is added to the Brother ControlCenter2. You can also easily scan, share, and organize photos and documents using Presto!® PageManager®.

OK!

**Presto!® PageManager® has been installed and the installation is now complete.**

# Installation using a wireless computer in Ad-hoc Mode for Mac OS® X 10.2.4 or greater



## Important

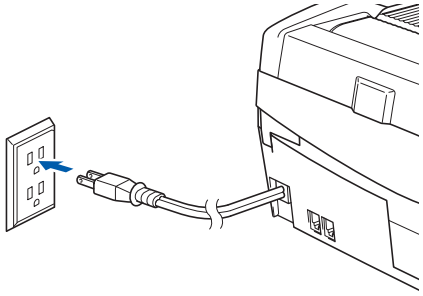
If you have previously configured the wireless settings of the machine, you must reset the network LAN settings before you can configure the wireless settings again.

For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **0** and choose `Reset`. Press ▲ for `Yes` to accept the change. The machine will restart automatically.

For MFC-640CW: Press **Menu/Set**, **5**, **0**, **1** and then press `1.Yes` to accept the change. The machine will restart automatically.

For MFC-820CW: Press **Menu**, ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Factory Reset` and then press **OK**. Press **1** to accept the change. The machine will restart automatically.

1. Turn on the machine by plugging in the power cord.



2. Turn on your Macintosh®.

3. Put the supplied CD-ROM into your CD-ROM drive.

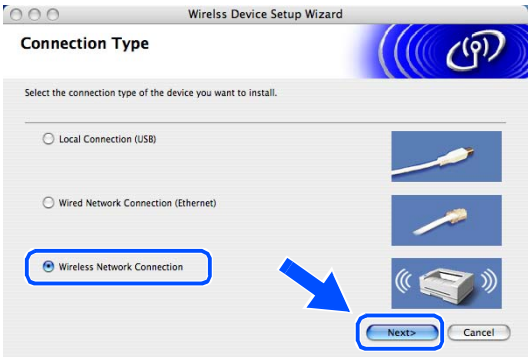
4. Double-click the **Start Here OSX** icon to install drivers and MFL-Pro Suite. If the language screen appears, choose your language.



**5** Click **MFL-Pro Suite** to install.




**6** Choose **Wireless Network Connection**, and then click **Next**.




**7** Choose **Wireless Setup and Driver Install**, and then click **Next**.




**8** Choose **Automatic (Recommended)** and then click **Next**.



**9** Choose **I'm not able to connect my device to my access point with a network cable.** Click **Next**.




**10** If you are using a wireless computer, choose **This PC has wireless capability.**, and make sure **I am using an access point in infrastructure mode** is not checked. Click **Next**.




If you are using a wired computer, choose **This PC uses a network cable to connect to the wireless network.**, and you must configure the wireless settings from the control panel. Click **Next** and follow the on-screen instructions to complete the setup. See *Using the Setup Wizard from the control panel LAN menu for a wireless network* on page 3-3. When finished, go to the driver installation in *step* ***20***.



**11** Read the **Important Notice**.




For DCP-340CW: Press **Menu**, ▲ or ▼ to choose **3**, **6**, and choose `WLAN`. Press **Menu**. If `Reboot OK?` is displayed, press ▲ for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

For MFC-640CW: Press **Menu/Set**, **5**, **6**, and then press ▲ or ▼ to choose `WLAN`. Press **Menu/Set**. If `Reboot OK?` is displayed, press `1.Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

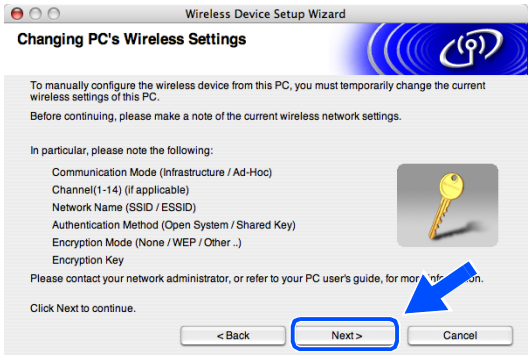
For MFC-820CW: Press **Menu** on the control panel. Press ▲ or ▼ for `LAN` and press **OK**. Press ▲ or ▼ for `Network I/F` and press **OK**. Press ▲ or ▼ for `WLAN` and press **OK**. If `Reboot OK?` is displayed, press **1** for `Yes`. The wired network interface will become inactive with this setting. The machine will restart automatically. After it restarts, check the box on the screen and click **Next**.

If `Accepted` is displayed, press **Stop/Exit**. Check the box on the screen and click **Next**.

**Note**

It will take approximately one minute for the LAN menu on the LCD to become available after the machine restarts or is turned on.

You need to temporarily change the wireless settings of your Macintosh®. Please follow the on-screen instructions. Please make sure you take notes on all the settings such as SSID or channel of your Macintosh®. You may need them when if you want to restore the current settings in future.



| Item | Record the current wireless computer settings |
|---|---|
| Communication mode: (Infrastructure/Ad-hoc) | |
| Channel: (1-14) | |
| Network name (SSID/ESSID) | |
| Authentication method (Open system/Shared key) | |
| Encryption: (None/WEP/Other) | |
| Encryption key: | |

**12** To communicate with the un-configured wireless machine, change the wireless settings on your Macintosh® to the machine's default settings which are shown on the screen. Click **Next**.




**13** If more than one wireless machine is available on the network, the following list appears. If the list is blank, check if the machine is powered on, and then click **Refresh**. Choose the machine you wish to configure, and click **Next**.

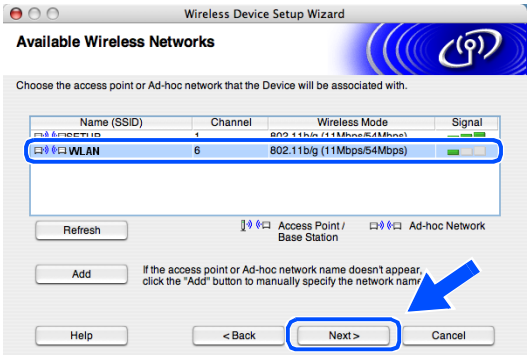



**Note**

The Default Node name of the NC-xxxx (where "xxxx" is your model name) is "BRW_xxxxxx" (where "xxxxxx" is the last six digits of Ethernet address).

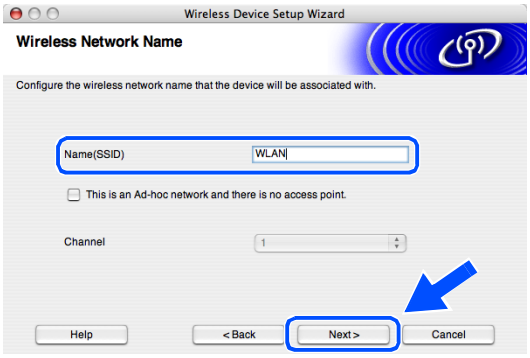
**14** The wizard will search for wireless networks available from your machine. If more than one wireless network is available, the following list appears. Choose the Ad-hoc network you wish to associate the machine with, and then click **Next**.

If no Ad-hoc wireless network are available, you need to create a new wireless network. *Go to step **17***.




**Note**

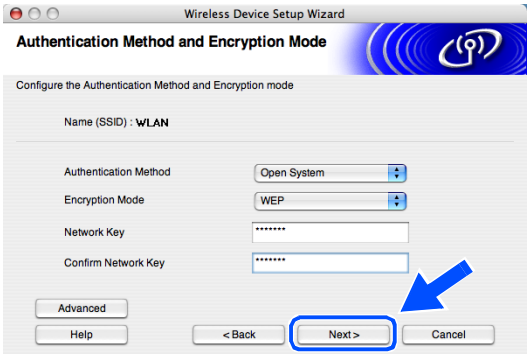
- If your target Ad-hoc network does not appear on the list, you can manually add it by clicking the **Add** button. Follow the on-screen instructions for entering the **Name (SSID)** and the **Channel** number.
- If the list is blank, check if the machine is within range for wireless communication. Then, click **Refresh**.




**15** If your network is not configured for Authentication and Encryption, the following screen will appear. To continue installation, click **OK** and *go to step **18***.



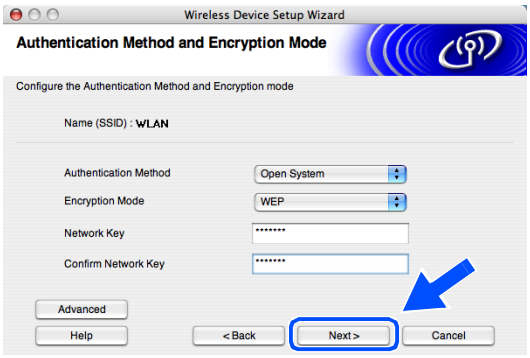

**16** If your network is configured for Authentication and Encryption, the following screen will appear. When configuring your Brother wireless machine, you must ensure that it is configured to match the Authentication and Encryption settings of your existing wireless network. Choose the **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network key** and click **Next**.



**Note**

- If you want to set more than one WEP key, click **Advanced**.
- If you do not know the Authentication or Encryption settings for network, contact your network administrator.

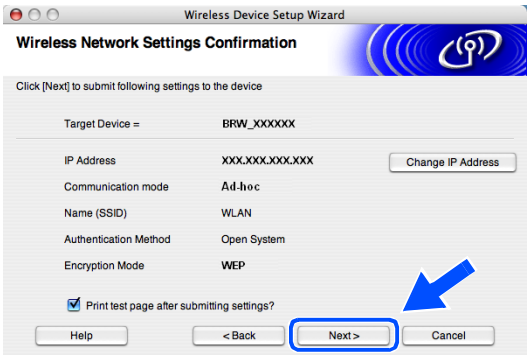
**17** Enter a new SSID and choose **Authentication Method** and **Encryption Mode** from the pull-downs in each setting box. Then enter the **Network Key** and click **Next**.




**Note**

If you do not know the Authentication or Encryption settings for network, contact your network administrator.

**18** Click **Next**. The settings will be sent to your machine. The settings will remain unchanged if you click **Cancel**.




**Note**

If you want to manually enter the IP address settings of your machine, click **Change IP Address** and enter the necessary IP address settings for your network. After making your selection, click **Next** and the Wizard will search for available wireless networks.

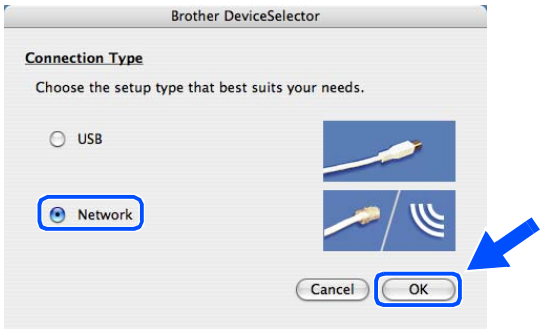
**19** To communicate with the configured wireless device, you must configure your Macintosh® to use same wireless settings. Manually change the wireless settings on your Macintosh® to match the machine's wireless settings shown on this screen. Click **Next**.
(The settings shown on this screen are for example only. Your settings will not be the same.)




OK! **You have completed the wireless setup. A four level indicator of your machine's LCD represents the wireless signal strength. If you chose to install the drivers in *step 7*, *go to step 20*.**

**20** The driver installation starts. Follow the on-screen instructions and restart your Macintosh®. (Not available if you chose **Driver Install Only** in *step 7*.)

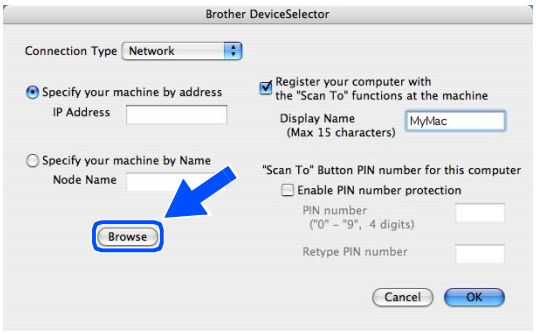
**21** When the **Brother DeviceSelector** window appears, choose **Network** and then click **OK**. The **Brother DeviceSelector** windows will not appear if you have also connected a USB interface cable to the machine before restarting your Macintosh or if you are overwriting a previously installed version of the Brother Software. If you encounter this problem, continue but skip *step **22*** through ***24***. After the software installation is completed, you should choose your Brother machine from the Model pop-up menu in the main screen of ControlCenter2. For details, see Chapter 10 in the Software User's Guide on the CD-ROM.



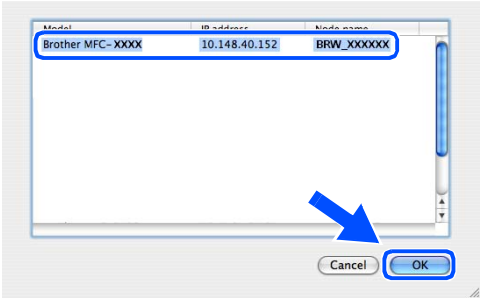

**22** If you want to use the machine's **Scan** key to scan over the network, you must check the **Register your computer with the "Scan To" functions at the machine** box. You must also enter a name for your Macintosh® in **Display Name**. The name you enter will appear on the machine's LCD when you press the **Scan** key and choose a scan option. You can enter any name up to 15 characters long. (For more information on network scanning, see Chapter 11 of the Software User's Guide on the CD-ROM.)



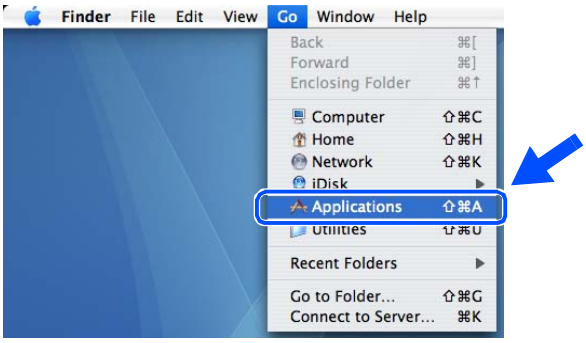
**23** Click **Browse**.



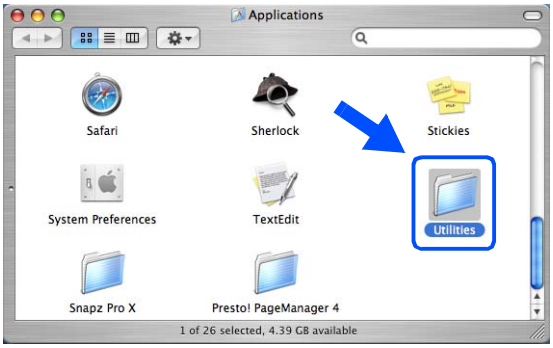

**24** Choose your model name, and then click **OK**.




**25** Click **Go**, then **Applications**.

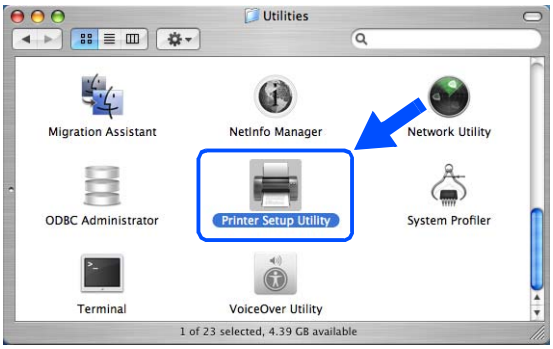



**26** Double-click the **Utilities** folder.



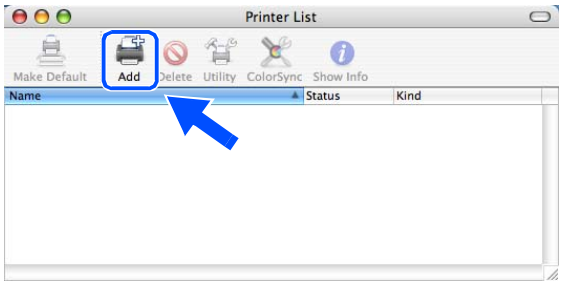
**27** Mac OS® X 10.3 or greater users:
Double-click the **Printer Setup Utility** icon.

For Mac OS® X 10.2.x users:
Double-click the **Print Center** icon.

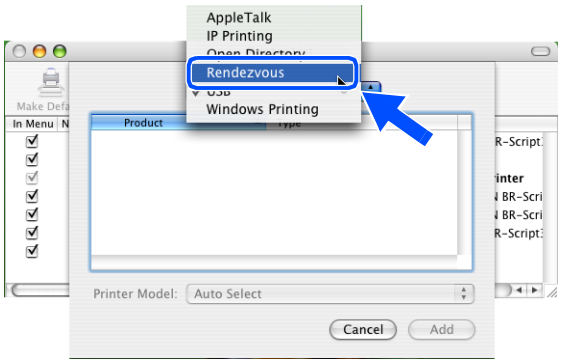



**28** Click **Add**.

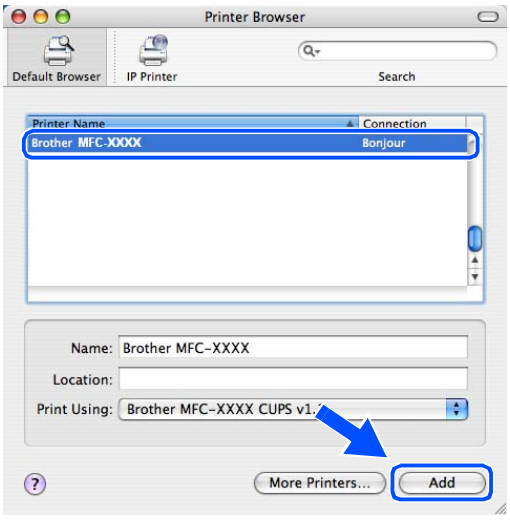
Mac OS X 10.2.4 to 10.3 users; *go to step* ***29***.
Mac OS X 10.4 users; *go to step* ***30***.




**29** Make the selection shown (For Mac OS X 10.2.4 to 10.3 users).

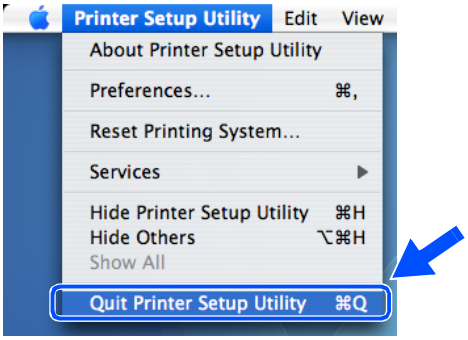



**30** Choose **Brother MFC-XXXX** (where XXXX is your model name), and then click **Add**.



**31** Mac OS® X 10.3 or greater users:
Click **Printer Setup Utility**, then **Quit Printer Setup Utility**.

For Mac OS® X 10.2.x users:
Click **Print Center**, then **Quit Print Center**.




**The MFL-Pro Suite, Printer driver, Scanner driver and Control Center2 have been installed.**

**Note**

For more information about connecting the machine to a Macintosh® network, see *Network printing from Macintosh®* on page 6-1.

**32** To install Presto!® PageManager®, click the **Presto!PageManager** icon and follow the on-screen instructions.




**Note**

When Presto!® PageManager® is installed, OCR capability is added to the Brother ControlCenter2. You can also easily scan, share, and organize photos and documents using Presto!® PageManager®.

**Presto!® PageManager® has been installed and the installation is now complete.**

# A Appendix A

## Other ways to set the IP address (for advanced users and administrators)



For information on how to configure your machine for a network using the BRAdmin Professional utility or a web browser, see *Setting the IP address and subnet mask* on page 2-3.

### Using DHCP to configure the IP address

The Dynamic Host Configuration Protocol (DHCP) is one of several automated mechanisms for IP address allocation. If you have a DHCP server in your network, the print server will automatically obtain its IP address from DHCP server and register its name with any RFC 1001 and 1002-compliant dynamic name services.

**Note**

If you do not want your print server configured via DHCP, BOOTP or RARP, you must set the BOOT METHOD to static so that the print server has a static IP address. This will prevent the print server from trying to obtain an IP address from any of these systems. To change the BOOT METHOD, use the BRAdmin Professional utility.

### Using BOOTP to configure the IP address

BOOTP is an alternative to rarp that has the advantage of allowing configuration of the subnet mask and gateway. In order to use BOOTP to configure the IP address make sure that BOOTP is installed and running on your host computer (it should appear in the `/etc/services` file on your host as a real service; type `man bootpd` or refer to your system documentation for information). BOOTP is usually started up via the `/etc/inetd.conf` file, so you may need to enable it by removing the “#” in front of the bootp entry in that file. For example, a typical bootp entry in the /etc/inetd.conf file would be:

```
#bootp dgram udp wait /usr/etc/bootpd bootpd -i
```

Depending on the system, this entry might be called “bootps” instead of “bootp”.

**Note**

In order to enable BOOTP, simply use an editor to delete the “#” (if there is no “#”, then BOOTP is already enabled). Then edit the BOOTP configuration file (usually /etc/bootptab) and enter the name, network type (1 for Ethernet), Ethernet address and the IP address, subnet mask and gateway of the print server. Unfortunately, the exact format for doing this is not standardized, so you will need to refer to your system documentation to determine how to enter this information (many UNIX® systems also have template examples in the bootptab file that you can use for reference). Some examples of typical /etc/bootptab entries include: (“BRN” below is “BRW” for a wireless network.)

```
BRN_310107 1  00:80:77:31:01:07 192.168.1.2
```

and:

```
BRN_310107:ht=ethernet:ha=008077310107:\
ip=192.168.1.2:
```

Certain BOOTP host software implementations will not respond to BOOTP requests if you have not included a download filename in the configuration file; if this is the case, simply create a null file on the host and specify the name of this file and its path in the configuration file.

As with rarp, the print server will load its IP address from the BOOTP server when the printer is powered on.

## Using RARP to configure the IP address

The Brother print server’s IP address can be configured using the Reverse ARP (RARP) facility on your host computer. This is done by editing the `/etc/ethers` file (if this file does not exist, you can create it) with an entry similar to the following: (“BRN” below is “BRW” for a wireless network.)

```
00:80:77:31:01:07   BRN_310107
```

Where the first entry is the Ethernet address of the print server and the second entry is the name of the print server (the name must be the same as the one you put in the `/etc/hosts` file).

If the rarp daemon is not already running, start it (depending on the system the command can be `rarpd, rarpd -a, in.rarpd -a` or something else; type `man rarpd` or refer to your system documentation for additional information). To verify that the rarp daemon is running on a Berkeley UNIX® based system, type the following command:

```
ps -ax | grep -v grep | grep rarpd
```

For AT&T UNIX®-based systems, type:

```
ps -ef | grep -v grep | grep rarpd
```

The Brother print server will get the IP address from the rarp daemon when the printer is powered on.

## Using APIPA to configure the IP address

The Brother print server supports the Automatic Private IP Addressing (APIPA) protocol. With APIPA, DHCP clients automatically configure an IP address and subnet mask when a DHCP server is not available. The device chooses it's own IP address in the range 169.254.1.0 through to 169.254.254.255. The subnet mask is automatically set to 255.255.0.0 and the gateway address is set to 0.0.0.0.



By default, the APIPA protocol is enabled. If you want to disable the APIPA protocol, you can disable it using control panel of the machine. For more information, see *9.APIPA* on page 4-16.

If the APIPA protocol is disabled, the default IP address of a Brother print server is 192.0.0.192. However, you can easily change this IP address number to match with the IP address details of your network.

## Using ARP to configure the IP address

If you are unable to use the BRAdmin application and your network does not use a DHCP server, you can also use the ARP command. The ARP command is available on Windows® systems that have TCP/IP installed as well as UNIX® systems. To use arp enter the following command at the command prompt:

```
arp -s ipaddress ethernetaddress
```

Where `ethernetaddress` is the Ethernet address (MAC address) of the print server and `ipaddress` is the IP address of the print server. For example:

### Windows® systems

Windows® systems require the dash "-" character between each digit of the Ethernet address.

```
arp -s 192.168.1.2 00-80-77-31-01-07
```

### UNIX®/Linux systems

Typically, UNIX® and Linux systems require the colon ":" character between each digit of the Ethernet address.

```
arp -s 192.168.1.2 00:80:77:31:01:07
```

**Note**

You must be on the same Ethernet segment (that is, there cannot be a router between the print server and operating system) to use the arp -s command.
If there is a router, you may use BOOTP or other methods described in this chapter to enter the IP address. If your Administrator has configured the system to deliver IP addresses using BOOTP, DHCP or RARP your Brother print server can receive an IP address from any one of these IP address allocation systems. In which case, you will not need to use the ARP command. The ARP command only works once. For security reasons, once you have successfully configured the IP address of a Brother print server using the ARP command, you cannot use the ARP command again to change the address. The print server will ignore any attempts to do this. If you wish to change the IP address again, use a web browser, TELNET (using the SET IP ADDRESS command) or factory reset the print server (which will then allow you to use the ARP command again).

To configure the print server and to verify the connection, enter the following command `ping ipaddress` where `ipaddress` is the IP address of the print server. For example, `ping 192.189.207.2`.



## Using the TELNET console to configure the IP address

You can also use the TELNET command to change the IP address.

TELNET is an effective method to change the machine's IP address. But a valid IP address must already be programmed into print server.

Type `TELNET` ipaddress at the command prompt of the system prompt, where ipaddress is the IP address of the print server. When you are connected, push the Return or Enter key to get the "#" prompt.

You will be prompted for a user name. Enter anything in response to this prompt.

You will then get the `Local>` prompt. Type `SET IP ADDRESS ipaddress`, where `ipaddress` is the desired IP address you wish to assign to the print server (check with your network administrator for the IP address to use). For example:

```
Local> SET IP ADDRESS 192.168.1.3
```

You will now need to set the subnet mask by typing `SET IP SUBNET subnet mask`, where `subnet mask` is the desired subnet mask you wish to assign to the print server (check with your network administrator for the subnet mask to use). For example:

```
Local> SET IP SUBNET 255.255.255.0
```

If you do not have any subnets, use one of the following default subnet masks:

255.0.0.0 for class A networks

255.255.0.0 for class B networks

255.255.255.0 for class C networks

The leftmost group of digits in your IP address can identify the type of network you have. The value of this group ranges from 1 through 127 for Class A networks (e.g., 13.27.7.1), 128 through 191 for Class B networks (e.g.,128.10.1.30), and 192 through 255 for Class C networks (e.g., 192.168.1.4).

If you have a gateway (router), enter its address with the command `SET IP ROUTER routeraddress`, where `routeraddress` is the desired IP address of the gateway you wish to assign to the print server. For example:

```
Local> SET IP ROUTER 192.168.1.4
```

Type `SET IP METHOD STATIC` to set the method of IP access configuration to static.

To verify that you have entered the IP information correctly, type `SHOW IP`.

Type `EXIT` or Ctrl-D (i.e., hold down the control key and type "D") to end the remote console session.

## Using the Brother Web BRAdmin server software for IIS* to configure the IP address

The Web BRAdmin server software is designed to manage all LAN/WAN Brother network connected devices. By installing the Web BRAdmin server software on a computer running IIS*, Administrators with a web browser can connect to the Web BRAdmin server, which then communicates with the device itself. Unlike the BRAdmin Professional utility - which is designed for Windows® systems only - the Web BRAdmin server software can be accessed from any client computer with a web browser that supports Java.

Please note this software is not included on the CD-ROM that was supplied with your Brother product.

Please visit http://solutions.brother.com/webbradmin to learn more about this software and to download it.

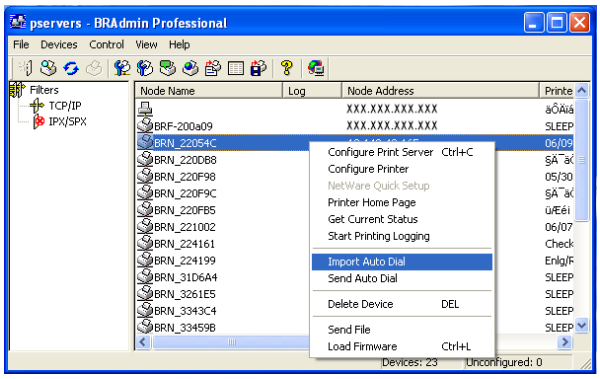
IIS* = Internet Information Server 4.0, 5.0 or 5.1

# Updating other machines through the network (Windows® only)



It is possible to program a Brother machine on the network with either settings from an already programmed machine or with data from the Brother PC-FAX Address Book. (See Chapter 5 of the Software User's Guide)

When Brother PC-FAX is used from a PC that has BRAdmin Professional installed, an extra option appears in BRAdmin Professional. By selecting a networked machine in the BRAdmin main window and right clicking it, you will be presented with an extra option, **Import Auto Dial**.

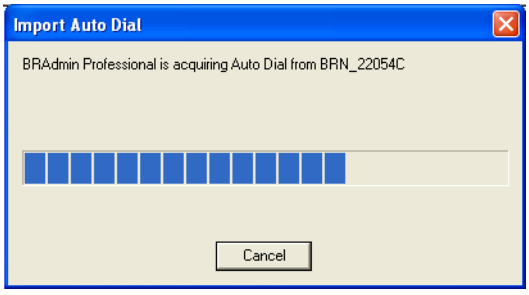



**Note**

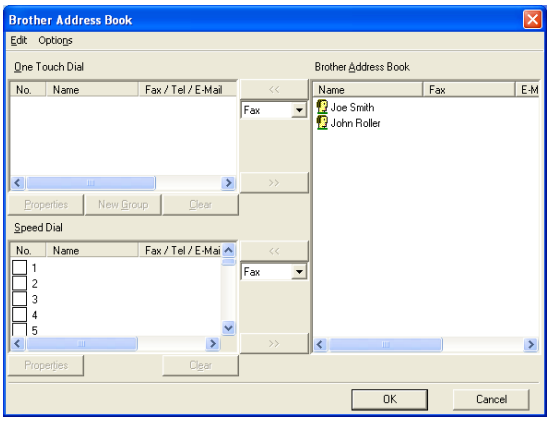
If the import Auto Dial option does not appear, open the Brother PC-FAX address book by selecting **Start**, **Programs**, **Brother**, **MFL-Pro Suite**, **PC-FAX Address Book**. It is necessary to run the address book utility to create an address book file.

- Group Dial settings cannot be configured using BRAdmin.
- For MFC-820CW users, a second fax number cannot be programmed into a Speed Dial using BRAdmin.

When you select this option, BRAdmin reads the telephone settings from that machine (if there are any programmed) into Brother PC-FAX Address Book.

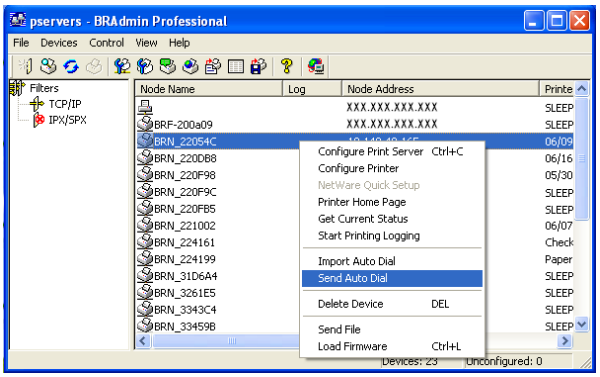


Illustrated below is a screenshot of the Brother PC-FAX Address Book dialog box. The left side of the dialog box displays the One-Touch / Speed-Dial numbers read from the machine. The right side displays a list of Brother Address Book members. You can add One-Touch / Speed-Dial numbers from the machine to this list or send members from the Address Book list to the machine.



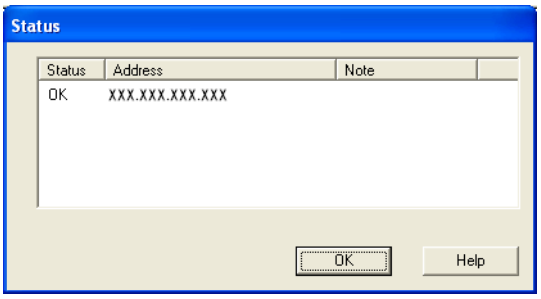

This data is then stored in the Windows Temp Folder and can be used to update a single or multiple machines on the network.

Highlight an individual or multiple networked Brother machines in the main BRAdmin window by highlighting and pressing the shift key on your keyboard. Right click the highlighted machine and press **Send Auto Dial**. The new data is then sent to all highlighted machines.




A dialog box is displayed showing the upload status of the current machine and beneath this the whole progress is displayed if updating multiple machines.

When the process is finished a dialog box is displayed showing which machine on the network has been updated.



# Installation when using a Network Print Queue or Share (printer driver only)



**Note**

- You must configure the IP address on your machine before you proceed with this chapter. If you have not configured the IP address, see *Chapter 2* first.
- Verify the host computer and print server are either on the same subnet, or that the router is properly configured to pass data between the two devices.
- Before installation, if you are using Personal Firewall software (e.g. the Internet Connection Firewall available in Windows XP), disable it. Once you are sure that you can print, re-start your Personal Firewall software.

1. Start the CD-ROM installation menu program according to the Quick Setup Guide.
2. Select the model name and your language (if necessary), and then click **Install Optional Applications**.
3. Click **Printer Driver (Only)**.
4. Click **Next** in response to the Welcome message. Follow the on-screen instructions.
5. Select **Standard Installation** and click **Next**.
6. Select **Network Shared Printer**, and then click **Next**.
7. Select your printer's queue, and then click **OK**.

**Note**

Contact your administrator if you are not sure about the location and name of the printer in the network.

8. Click **Finish**.

# B Appendix B

## Print server specifications



### Ethernet wired network

| | | |
|---|---|---|
| **Model name** | NC-110h | |
| **Operating system support** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 9.1 to 9.2, Mac OS® X 10.2.4 or greater | |
| **Protocol support** | TCP/IP | ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), NetBIOS Name Resolution, WINS, DNS Resolver, LPR/LPD, Custom Raw Port/Port9100, FTP Server, mDNS, TELNET, SNMP |
| **Network type** | 10/100BASE-TX Ethernet network | |
| **Network printing** | Windows® 98/98SE/Me Peer-to-Peer printing<br>Windows® 2000/XP TCP/IP printing<br>Macintosh® printing (Mac OS® 9.1-9.2 and Mac OS® 10.2.4 or greater supporting TCP/IP) | |
| **Network PC-FAX (Not available for DCP-340CW)** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 9.1-9.2 and Mac OS® 10.2.4 or greater (Send only) | |
| **Network scanning** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 10.2.4 or greater | |
| **Network PhotoCapture Center™** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 9.1-9.2 and Mac OS® 10.2.4 or greater | |
| **Computer requirements (for drivers, BRAdmin Professional, Peer-to-Peer software, etc.)** | Processor<br>Minimum Speed | Pentium® II or equivalent for Windows® 98/98SE/Me/ 2000 Professional/XP |
| | Minimum RAM | 24MB for Windows® 98/98SE/Me<br>32MB for Windows® 2000 Professional<br>64MB for Windows® XP |
| | Recommended RAM | 32MB for Windows® 98/98SE/Me<br>64MB for Windows® 2000 Professional<br>128MB for Windows® XP |
| **Macintosh® connection** | Computer | Ethernet ready Power Macintosh® |
| | Processor<br>Minimum Speed | All base models meet minimum requirements |
| | Minimum RAM | 32MB for Mac OS® 9.1 to 9.2<br>128MB for Mac OS® X 10.2.4 or greater |
| | Recommended RAM | 64MB for Mac OS® 9.1 to 9.2<br>160MB for Mac OS® X 10.2.4 or greater |

| | | |
|---|---|---|
| **Management utilities** | BRAdmin Professional | Windows® 98/98SE/Me/2000/XP |
| | BRAdmin Light [1] | Mac OS® X 10.2.4 or greater |
| | Web BRAdmin [1] | Windows® 2000 Professional / Server / Advanced Server, Windows® XP Professional |



1. BRAdmin Light and Web BRAdmin are available as a download from http://solutions.brother.com.

## Ethernet wireless network

| | | |
|---|---|---|
| **Model name** | NC-120w | |
| **Operating system support** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® X 10.2.4 or greater | |
| **Protocol support** | TCP/IP | ARP, RARP, BOOTP, DHCP, APIPA (Auto IP), NetBIOS Name Resolution, WINS, DNS Resolver, LPR/LPD, Custom Raw Port/Port9100, FTP Server, mDNS, TELNET, SNMP |
| **Network type** | IEEE 802.11b/g wireless | |
| **Frequency** | 2412-2472 MHz | |
| **RF channels** | US/Canada | 1-11 |
| | Europe/Oceania | 1-13 |
| | Japan | 1-14 |
| **Communication mode** | Infrastructure, Ad-hoc 802.11 | |
| **Data rates** | 802.11b | 11/5.5/2/1 Mbps |
| | 802.11g | 54/48/36/24/18/12/9/6 Mbps |
| **Link distance** | 70 m (233 ft.) at lowest data rate<br>(The distance rate will vary upon environment and other equipment location.) | |
| **Network security** | SSID/ESSID, 128 (104) / 64 (40) bit WEP, WPA-Personal (TKIP) | |
| **Network printing** | Windows® 98/98SE/Me Peer-to-Peer printing<br>Windows® 2000/XP TCP/IP printing<br>Macintosh® printing (Mac OS® 10.2.4 or greater supporting TCP/IP) | |
| **Network PC-FAX (Not available for DCP-340CW)** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 10.2.4 or greater (Send only) | |
| **Network scanning** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 10.2.4 or greater | |
| **Network PhotoCapture Center™** | Windows® 98/98SE/Me/2000/XP<br>Mac OS® 10.2.4 or greater | |

| | | |
|---|---|---|
| **Computer requirements (for drivers, BRAdmin Professional, Peer-to-Peer software, etc.)** | Processor Minimum Speed | Pentium® II or equivalent for Windows® 98/98SE/Me/ 2000 Professional/XP |
| | Minimum RAM | 24MB for Windows® 98/98SE/Me<br>32MB for Windows® 2000 Professional<br>64MB for Windows® XP |
| | Recommended RAM | 32MB for Windows® 98/98SE/Me<br>64MB for Windows® 2000 Professional<br>128MB for Windows® XP |
| **Macintosh® connection** | Computer | Wireless (AirPort) ready Power Macintosh® |
| | Processor Minimum Speed | All base models meet minimum requirements |
| | Minimum RAM | 128MB for Mac OS® X 10.2.4 or greater |
| | Recommended RAM | 160MB for Mac OS® X 10.2.4 or greater |
| **Management utilities** | BRAdmin Professional | Windows® 98/98SE/Me/2000/XP |
| | BRAdmin Light [1] | Mac OS® X 10.2.4 or greater |
| | Web BRAdmin [1] | Windows® 2000 Professional / Server / Advanced Server,<br>Windows® XP Professional |

1. BRAdmin Light and Web BRAdmin are available as a download from http://solutions.brother.com.

# Function table and default factory settings

## (For DCP-340CW)



| Level one | Level two | Level three | Options 1 | Options 2 | Factory settings |
|---|---|---|---|---|---|
| 3.LAN | 1.TCP/IP (Wired) | 1.BOOT Method | Auto/ Static/ RARP/ BOOTP/ DHCP | — | Auto |
| | | 2.IP Address | 1.Change | [000-255].[000-255].[000-255].[000-255] | [169].[254].[001-254] .[000-255] [1] |
| | | | 2.Exit | — | — |
| | | 3.Subnet Mask | 1.Change | [000-255].[000-255].[000-255].[000-255] | 255.255.0.0 [2] |
| | | | 2.Exit | — | — |
| | | 4.Gateway | 1.Change | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | | 2.Exit | — | — |
| | | 5.Node Name | 1.Change | BRN_XXXXXX= (last 6 figures of Ethernet address) (up to 15 characters) | BRN_XXXXXX |
| | | | 2.Exit | — | — |
| | | 6.WINS Config | Auto/ Static | — | Auto |
| | | 7.WINS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 8.DNS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 9.APIPA | On/ Off | — | On |
| | 2.TCP/IP (WLAN) | 1.BOOT Method | Auto/ Static/ RARP/ BOOTP/ DHCP | — | Auto |
| | | 2.IP Address | 1.Change | [000-255].[000-255].[000-255].[000-255] | [169].[254].[001-254] .[000-255] [1] |
| | | | 2.Exit | — | — |
| | | 3.Subnet Mask | 1.Change | [000-255].[000-255].[000-255].[000-255] | 255.255.0.0 [2] |
| | | | 2.Exit | — | — |
| | | 4.Gateway | 1.Change | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | | 2.Exit | — | — |
| | | 5.Node Name | 1.Change | BRW_XXXXXX= (last 6 figures of Ethernet address) (up to 15 characters) | BRW_XXXXXX |
| | | | 2.Exit | — | — |
| | | 6.WINS Config | Auto/ Static | — | Auto |
| | | 7.WINS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 8.DNS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 9.APIPA | On/ Off | — | On |

| Level one | Level two | Level three | Options 1 | Options 2 | Factory settings |
|---|---|---|---|---|---|
| 3.LAN | 3.Setup WLAN | 1.Setup Wizard | Searching SSID | Select SSID & Set<br>(Select SSID from list or manually add SSID) | — |
| | | 2.SecurEasySetup | Connecting WLAN<br>Connected/<br>Connection Error | — | — |
| | 4.WLAN Status | 1.Status | Active(802.11b)/<br>Active(802.11g)/<br>Disabled/<br>Searching SSID | — | — |
| | | 2.Signal | Strong/ Medium/<br>Weak/ None | — | — |
| | | 3.SSID | (Shows SSID with less than 33 digits) | — | — |
| | | 4.Comm.Mode | Ad-hoc/<br>Infrastructure | — | — |
| | | 5.Security Mode | WEP/ WPA-PSK/<br>None | KEY1/ KEY2/ KEY3/ KEY4 (when WEP is selected) | — |
| | 5.Setup Misc. | 1.Wired LAN | Auto/ 100B-FD/<br>100B-HD/ 10B-FD/<br>10B-HD | — | Auto |
| | 6.Network I/F | Wired LAN | Reboot OK<br>1.Yes | — | Wired LAN |
| | | | Reboot OK<br>2.No | Exit with no change | |
| | | WLAN | Reboot OK<br>1.Yes | — | |
| | | | Reboot OK<br>2.No | Exit with no change | |
| | 0.Factory Reset | Reset | Yes | — | — |
| | | | No | — | — |
| | | Exit | — | — | — |

1. The factory setting for **IP Address** may be changed by the **APIPA** setting.
2. The factory setting for **Subnet Mask** may be changed by the **APIPA** setting.

## (For MFC-640CW)

| Level one | Level two | Level three | Options 1 | Options 2 | Factory settings |
|---|---|---|---|---|---|
| 5.LAN | 1.TCP/IP (Wired) | 1.BOOT Method | Auto/ Static/ RARP/ BOOTP/ DHCP | — | Auto |
| | | 2.IP Address | 1.Change | [000-255].[000-255].[000-255].[000-255] | [169].[254].[001-254].[000-255] [1] |
| | | | 2.Exit | — | — |
| | | 3.Subnet Mask | 1.Change | [000-255].[000-255].[000-255].[000-255] | 255.255.0.0 [2] |
| | | | 2.Exit | — | — |
| | | 4.Gateway | 1.Change | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | | 2.Exit | — | — |
| | | 5.Node Name | 1.Change | BRN_XXXXXX=<br>(last 6 figures of Ethernet address)<br>(up to 15 characters) | BRN_XXXXXX |
| | | | 2.Exit | — | — |
| | | 6.WINS Config | Auto/ Static | — | Auto |
| | | 7.WINS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 8.DNS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 9.APIPA | On/ Off | — | On |
| | 2.TCP/IP (WLAN) | 1.BOOT Method | Auto/ Static/ RARP/ BOOTP/ DHCP | — | Auto |
| | | 2.IP Address | 1.Change | [000-255].[000-255].[000-255].[000-255] | [169].[254].[001-254].[000-255] [1] |
| | | | 2.Exit | — | — |
| | | 3.Subnet Mask | 1.Change | [000-255].[000-255].[000-255].[000-255] | 255.255.0.0 [2] |
| | | | 2.Exit | — | — |
| | | 4.Gateway | 1.Change | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | | 2.Exit | — | — |
| | | 5.Node Name | 1.Change | BRW_XXXXXX=<br>(last 6 figures of Ethernet address)<br>(up to 15 characters) | BRW_XXXXXX |
| | | | 2.Exit | — | — |
| | | 6.WINS Config | Auto/ Static | — | Auto |
| | | 7.WINS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 8.DNS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | 9.APIPA | On/ Off | — | On |
| | 3.Setup WLAN | 1.Setup Wizard | Searching SSID | Select SSID & Set<br>(Select SSID from list or manually add SSID) | — |
| | | 2.SecurEasySetup | Connecting WLAN/ Connected/ Connection Error | — | — |

| Level one | Level two | Level three | Options 1 | Options 2 | Factory settings |
|---|---|---|---|---|---|
| 5.LAN | 4.WLAN Status | 1.Status | Active(802.11b)/ Active(802.11g)/ Disabled/ Searching SSID | — | — |
| | | 2.Signal | Strong/ Medium/ Weak/ None | — | — |
| | | 3.SSID | (Shows SSID with less than 33 digits) | — | — |
| | | 4.Comm.Mode | Ad-hoc/ Infrastructure | — | — |
| | | 5.Security Mode | WEP/ WPA-PSK/ None | KEY1/ KEY2/ KEY3/ KEY4 (when WEP is selected) | — |
| | 5.Setup Misc. | 1.Wired LAN | Auto/ 100B-FD/ 100B-HD/ 10B-FD/ 10B-HD | — | Auto |
| | | 2.Time Zone | GMTXXX:XX | — | GMT-00:00 |
| | 6.Network I/F | Wired LAN | Reboot OK 1.Yes | — | Wired LAN |
| | | | Reboot OK 2.No | Exit with no change | |
| | | WLAN | Reboot OK 1.Yes | — | |
| | | | Reboot OK 2.No | Exit with no change | |
| | 0.Factory Reset | 1.Reset | 1.Yes | — | — |
| | | | 2.No | — | — |
| | | 2.Exit | — | — | — |

1. The factory setting for **IP Address** may be changed by the **APIPA** setting.
2. The factory setting for **Subnet Mask** may be changed by the **APIPA** setting.

## (For MFC-820CW)

| Level one | Level two | Level three | Options 1 | Options 2 | Factory settings |
|---|---|---|---|---|---|
| LAN | TCP/IP (Wired) | BOOT Method | Auto/ Static/ RARP/ BOOTP/ DHCP | — | Auto |
| | | IP Address | Change | [000-255].[000-255].[000-255].[000-255] | [169].[254].[001-254].[000-255] [1] |
| | | | Exit | — | — |
| | | Subnet Mask | Change | [000-255].[000-255].[000-255].[000-255] | 255.255.0.0 [2] |
| | | | Exit | — | — |
| | | Gateway | Change | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | | Exit | — | — |
| | | Node Name | Change | BRN_XXXXXX=<br>(last 6 figures of Ethernet address)<br>(up to 15 characters) | BRN_XXXXXX |
| | | | Exit | — | — |
| | | WINS Config | Auto/ Static | — | Auto |
| | | WINS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | DNS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | APIPA | On/ Off | — | On |
| | TCP/IP (WLAN) | BOOT Method | Auto/ Static/ RARP/ BOOTP/ DHCP | — | Auto |
| | | IP Address | Change | [000-255].[000-255].[000-255].[000-255] | [169].[254].[001-254].[000-255] [1] |
| | | | Exit | — | — |
| | | Subnet Mask | Change | [000-255].[000-255].[000-255].[000-255] | 255.255.0.0 [2] |
| | | | Exit | — | — |
| | | Gateway | Change | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | | Exit | — | — |
| | | Node Name | Change | BRW_XXXXXX=<br>(last 6 figures of Ethernet address)<br>(up to 15 characters) | BRW_XXXXXX |
| | | | Exit | — | — |
| | | WINS Config | Auto/ Static | — | Auto |
| | | WINS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | DNS Server | Primary/ Secondary | [000-255].[000-255].[000-255].[000-255] | 000.000.000.000 |
| | | APIPA | On/ Off | — | On |
| LAN | Setup WLAN | Setup Wizard | Searching SSID | (Select SSID from list or manually add SSID) | — |
| | | SecureEasySetup | Connecting WLAN/ Connected/ Connection Error | — | — |

| Level one | Level two | Level three | Options 1 | Options 2 | Factory settings |
|---|---|---|---|---|---|
| | WLAN Status | Status | Active(802.11b)/ Active(802.11g)/ Disabled/ Searching SSID | — | — |
| | | Signal | Strong/ Medium/ Weak/ None | — | — |
| | | SSID | (Shows SSID with less than 32 digits) | — | — |
| | | Comm.Mode | Ad-hoc/ Infrastructure | — | — |
| | | Security Mode | WEP/ WPA-PSK/ None | KEY1/ KEY2/ KEY3/ KEY4 (when WEP is selected) | — |
| | Setup Misc. | Wired LAN | Auto/ 100B-FD/ 100B-HD/ 10B-FD/ 10B-HD | — | Auto |
| | | Time Zone | GMTXXX:XX | — | GMT+00:00 |
| | Network I/F | Wired LAN | Reboot OK? | 1.Yes/ 2.No | Wired LAN |
| | | WLAN | Reboot OK? | 1.Yes/ 2.No | |
| | Factory Reset | | 1.Yes/ 2.No | — | — |

1. The factory setting for **IP Address** may be changed by the **APIPA** setting.
2. The factory setting for **Subnet Mask** may be changed by the **APIPA** setting.

# Entering Text (for MFC-640CW and MFC-820CW)



When you are setting certain menu selections, such as the Station ID, you may need to enter text into the machine. Most number keys have three or four letters printed on keys. The keys for **0**, **#** and ✳ do not have printed letters because they are used for special characters.

By pressing the proper number key repeatedly, you can access the character you want.

| Press Key | one time | two times | three times | four times |
|---|---|---|---|---|
| **2** | A | B | C | 2 |
| **3** | D | E | F | 3 |
| **4** | G | H | I | 4 |
| **5** | J | K | L | 5 |
| **6** | M | N | O | 6 |
| **7** | P | Q | R | S |
| **8** | T | U | V | 8 |
| **9** | W | X | Y | Z |

### Putting spaces

To enter a space in a fax number, press ▶ once between numbers. To enter a space in a name, press ▶ twice between characters.

### Making corrections

If you entered an incorrect letter and want to change it, press ◀ to move the cursor under the incorrect letter. Then press **Stop/Exit** for MFC-640CW or press **Clear** for MFC-820CW. All letters above and to the right of the cursor will be deleted. Re-enter the correct letter. You can also back up and type over incorrect letters.

### Repeating letters

If you need to enter a letter that is on the same key as the letter before, press ▶ to move the cursor to the right before you press the key again.

### Special characters and symbols

For MFC-640CW
Press ✳, **#** or **0**, and then press ◀ or ▶ to move the cursor under the special character or symbol you want. Then press **Menu/Set** to choose it.

For MFC-820CW
Press ✳, **#** or **0** repeatedly until you see the special character or symbol you want.

| | | |
|---|---|---|
| Press ✳ | for | (space) ! " # $ % & ' ( ) * + , - . / € |
| Press **#** | for | : ; < = > ? @ [ ] ^ _ |
| Press **0** | for | Ä Ë Ö Ü À Ç È É 0 |

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